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PEDAGOGICS ABROAD.—No. I.

A GREAT MEETING OF TEACHERS IN BELGIUM.

THERE has sprung up among teachers a very laudable desire to learn all they can from foreign countries. In past years there was some danger of our thinking we knew so much educationally that there is nothing for us worth learning outside of our own borders. The Centennial Exposition opened our eyes to this fault, and now the most of us are happily disposed to seek information wherever it can be obtained. To such the following translation of a letter from a teacher in Belgium to a friend in Canada, and published in the *Journal de L' Instruction Publique*, of Quebec, will be very interesting. It describes, among other things, a great teachers' meeting or conference held at Ghent, Belgium, last summer. The number of teachers present was 2,000, and the proceedings indicate professional thinking quite as much advanced as our own.

THE LETTER.

SCHAERBEEK, Sept. 12, 1876.

My Dear Friend:

I would have written you sooner, but I waited for the congress of Belgian teachers which was held at Ghent yesterday and to-day. I was present. The attendance was a little less than 2,000. Nothing could be more imposing. I followed with much interest the debates on the different questions. There will probably be a report in the "*Progress*," so I will be brief.

The question of the teaching of the mother-tongue was the first in the order of the day. The result of the discussion was that the teachers were unanimous in the opinion that grammar should not be taught to elementary classes—that such teaching is a loss of time. No more definitions then, no more rules, nothing only the practical. This accords with my own opinion. This is why I have so strongly favored the introduction of linguistic exercises in place of grammar in our schools. For advanced classes the assembly was divided. Some proposed the complete exclusion of the *book*. A professor of the University of Ghent combatted this idea and carried his point by a vote of two-thirds; but I flatter myself that the remaining third, of which I was one, was composed of the most intelligent teachers in the congress. The country teachers, it is evident, are not yet quite prepared for a reform so radical. It will come, however, for I consider grammar a veritable *plague* in our schools. As the matter was finally settled the book is still to be used in the higher classes, but only as a collection of rules to be consulted in case of doubt and nothing more. A mere mechanical analysis in language was condemned. They have here, as you have, a beautiful system of *logical analysis*, which ought to be the basis of all teaching of grammar. The sentence or phrase once separated into propositions, it is easy to dissect each of these into words, and to determine their functions; but, pray, let us no longer attempt to analyze sentences after the manner of the old routine-teachers with whom you are acquainted. I need not tell you anything more on this point for I know that you understand me.

Spelling words in the old-fashioned way is no longer in use. No one now approves of it. The dictation exercises are first carefully studied before being recited. The scholars should be sufficiently prepared to recite their lessons in dictation almost without mistake. This study is founded on reading, observation, &c. Teachers here hold with reason that a child ought to be allowed to see a word before he is called upon to write it; and that it is perfectly useless, if not hurtful, to make him write words that he does not know. Are you of this opinion? If so, then you also have had to reform on this point. Lessons of intuition, or object lessons, should be com-

pletely transformed. Instead of teaching the child to say that the table has four legs, one top, and is used for —— &c., let him learn something new, for example, that the boards came from the oak, the oak from the acorn, &c. The child ought to be initiated into the natural sciences at a very young age. But to profit him most in this field, he must have his mind fed with what is fresh and new, and not be wearied with routine lessons on what is common and familiar. You see, my dear friend, that we are making progress in Belgium. I see routine giving way to my great joy, and I will aid in felling it to the earth.

The conference recommended the use of reading books based on the sciences, and not on the worn-out systems of the past or the gathered nonsense of the present. It was time. A reading-book for children should be large—very large. We should also have educational libraries for the young. Equally necessary are school museums, to enable teachers to give object lessons with effect. They favor walks by teachers and scholars to places where nature can be studied to the best advantage, and visits to museums and monuments for the purpose of learning history, &c. The doctrine is, all comes through the senses. Success to the one that goes farthest in showing us what children should be allowed to see, and down with the teacher who prates of subjects which children cannot understand, and which consequently destroy all their originality.

The congress gave attention also to the means to be employed in developing the artistic taste of children. The method proposed was again educational walks, the observation of nature, of leaves, flowers, works of architecture, drawing. You see at once the drift of the discussion. I am persuaded that some educational walks will soon constitute a part of our system of education. They also insisted that more time should be devoted to the teaching of drawing, that lessons on this subject should be given every day. Music should form a part of every course in all elementary schools, and many hold that gymnastics contributes towards the development of a taste for the beautiful. Of the truth of this latter opinion I am not altogether sure.

A young teacher, in a paper well considered and well written, took the ground that there ought to be in each Canton an extra teacher to take the place of any one sick or necessarily absent.

Here now, my dear friend, you have a part of the numerous incidents that always transpire in a great assembly. These congresses are calculated to do much good. United, the teachers are a power. You have need of such a union in Canada, and I am astonished that you do not make an appeal to your brothers to induce them to imitate the teachers in Belgium. Here, we already owe much to these great re-unions. The newspapers give an account of our sittings. One said: "After all, these teachers mean something!" The time of indifference has passed. We have obtained a good pension law, our enemies do not dare to show themselves in public, the school authorities of the communes fear ridicule if they should announce a vacancy at a very small salary. The school houses have become palaces, each district is ambitious to have the best and most beautiful. The school furniture is selected with reference to the health and convenience of the scholars, and the walls of the school-rooms are covered with maps and pictures. In many schools you may see collections of plants, animals, insects, birds, &c. The progress made within a few years is immense, and one can safely affirm that it is owing to the teachers' union that we have advanced with so much rapidity. I have already told you that you can never count upon rapid progress while each teacher works by himself without associating with his fellows. The association of the Laval Normal School does something, but something more is wanted.

I do not wish to drop my subject until I have made you acquainted with my own experience in the matter of educational excursions. I will describe an excursion of the kind which took place during the vacation. We made an appeal to the parents of some thirty scholars whom we wished to take on the journey and they provided them with fifteen francs apiece, in all 450 francs. This we expended in a trip across Belgium. The railroads gave us a reduction of fifty per cent. I was enchanted with the experience. The scholars conducted themselves on the way like little men; they observed, questioned, judged, reasoned. If practicable, teaching should be confined to this method, especially in certain branches. We one day followed a little river from its source to its mouth. A half day was sufficient to make the children understand the words, *source*, *mouth*, *right bank*, *left bank*, *up the river*, *down the river*, *basin*, *affluent*, *confluent*, and a multitude of others which would have required a week of explanations in the school-room. I am certain further that these words are now fixed forever in the memory of the children. We visited also the seashore. There, as everywhere, what questions were asked! What explanations were required to be given! In returning we stopped to look at the monuments at the city of Bruges. We found fully illustrated there that part of the history of the Middle Ages of which the belfry is the symbol. We saw the tomb of Charles the Bold, and that of his daughter, Mary. Could anything aid one better than this relic of the past to recall the history of the kings of Burgundy? We also ran through the museum of natural history. A single visit enabled us to make understood the four grand divisions of the animal kingdom. We intend to return there again to study the details. We made as we crossed the country many botanical explorations. The children found means to instruct and amuse themselves at every step.

Now, my dear friend, does it not appear to you that this is the method of teaching which we shall follow in the future? In this direction we are rapidly drifting in Belgium. Some time will doubtless elapse before such a method can become general. We are now seeking the right road. I will inform you of all the new discoveries we make. You are at liberty to use them as best you can for the good of your country. Your devoted friend, PIÉRARD.

EDUCATION IN CHINA.

[Rev. Dr. Leggre, for many years a Missionary of the London Missionary Society in China, while on a recent visit to his native country, delivered to a school a very interesting address on "Education in China," from which we make the following extracts. Dr. Leggre is well versed in Chinese literature, having been the translator of the works of Confucius.—*Ed.*]

Education in China will form the main subject of my address. I might almost be, I suppose, the grandfather of the oldest of you, and yet I feel a measure of respect and awe in standing before you. A good many

of you will remember what we are told about John Frebonius, one of the masters of the school which the boy Luther attended at Eisenach. He always raised his cap to his pupils, when he entered the schoolroom; and when asked why he did so, he replied: "There are among these boys men of whom God will one day make burgomasters, chancellors, doctors, and magistrates. Although you do not yet see them with the badges of their dignity, it is right that you should treat them with respect." This was well spoken by Frebonius, and more than thirty years ago, I was delighted to find the same sentiment recorded of Confucius, the sage of China. "A youth," said he, on one occasion, "is to be regarded with respect. How do we know that his future will not be equal to our present?" He then added, in words on which I may have something to say, ere I have done—"If he reach the age of forty or fifty, and has not made himself heard of, he will not be worth being regarded with respect." Well, you know that education is very much prized in China. It is much more prized in some of the provinces of that vast country than in others; but I do not think I exaggerate in saying that to-day there are more boys and students in schools and under masters in China than there are of men, women, and children all together in Great Britain. I hold here in my hand a Chinese Primer, one of the first lesson-books which boys have to learn when they go to school. Its author, a Mr. Wang Pih-haon, died in the year 1296, so that it must have been written 600 years ago.

He prepared it for family use; but it has long been taught all over the empire. There must be upwards of a hundred millions of Chinese now living who could repeat it all over from beginning to end. You see it is printed in large characters, the better to impress the form of each on the eye and mind, and it is in a sort of doggerel rhyme, each line consisting of six words, with a cæsural pause exactly in the middle, that it may be the more easily remembered. It is not long, and I will try to give you some idea of its contents. After some preliminary remarks to the effect that all men are good at first, and very much alike, and that it is their being educated or not which makes them differ as they subsequently do, and illustrating this by examples, the key-note of the treatise is struck in the following lines:

> The child fed but untaught,
> To the parent is shame;
> To teach, and not be strict,
> In the teacher is blame.
> If the boy do not learn,
> Very wrong sure is he;
> If in youth he be idle,
> When old, what will he be?
> As the gem, when uncut,
> For nothing is good,
> So the man who's unlearned
> Knows not what he should."

Having thus opened the subject, the author sets forth the rudiments of Chinese learning; good manners, filial piety, brotherly duty; the elements of arithmetic; the more conspicuous heavenly bodies; the three bonds of society—ruler and subject, father and son, husband and wife; the names of the seasons, of the cardinal points and of the five elements; the five virtues of benevolence, righteousness, propriety, conscientiousness, and truthfulness; the six grains; the six animals good for food, including the horse and the dog; the seven passions; the eight instruments of music; the nine degrees of kinship; and the duties of the social relations—affection between parents and children, mutual accommodation between husband and wife, kindness on the part of the elder brother, and submissive consideration on the part of the younger; strict regard to age between elders and juniors generally; endeavors to promote one another's virtue between friends, respectfulness on the part of the ruler, and leal-heartedness on the part of the subject. These rudiments being supposed to be mastered, the pupil goes on to a higher school, and through a very small portico of grammar, advances into the field of Chinese literature. Then he begins with a work on filial piety and its duties, by Confucius, from which he proceeds to the Four Books, which are chiefly occupied with the sayings and doings of the doctrines of the sage. Some analogy has been fancied to exist between them and our Gospels. The Primer contains a sentence or two about the matter and authorship of each. The boy learns to read all these books, and, in the course of years, to understand them more or less; and he has to commit them all to memory. When he has done his duty on them, he is prepared to go on to the higher classical books, which Mr. Wang Phi-haon says are six.

The first is called the Book of Changes, to the meaning of which, after more than twenty years' study, I have hitherto failed to find the clue. The second is the Book of Ancient Historical Documents, relating to events and individuals during a period of nearly 2000 years, though the latest document belongs to the 7th century

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writing will become easy to everybody on that account.

The office of the Society above referred to—(Société pour l'instruction et la protection des sourds-muets) is at 14, quai de la Mégisserie, Paris. The "Manuel complet de la Phonomimie, with illustrations of the gestes, etc., is published by Alphonse Picard, 82 Rue Bonaparte, Paris. Price, one franc.

W.

BOARDING SCHOOL IN 1570.

I INVITE you, boys and girls, to cross the wide Atlantic, and find amusement in visiting a boarding school, or academy, of the olden time. In the days of good Queen Bess, schools were "few and far between," as angels' visits are said to be, but in the town of Norwich, England, there existed a celebrated "training school" for the youth of both sexes. An old abbey furnished the requisite room, for high-born maidens slept in the cells where nuns had once repeated their *Ave Marias*, and were gathered by day in a school-room which had formerly been used as a refectory or dining-hall. Separated from this building by a crumbling stone wall of great height, was the ancient monastery, which was now transformed into an academy for the boys of Albion. Both buildings were well-nigh covered with beautiful clambering ivy.

The children of that day, in dress and appearance, were exact miniature copies of grown-up people. Queen Elizabeth numbered three thousand robes in her wardrobe, and the daughters of noblemen carried with them to school from thirty to three hundred dresses, according to the wealth and station of their parents. Young misses of six and ten years wore trains on important occasions, and, at all times appeared in long, pointed waists, with deep ruffles around the neck. Silk robes were embroidered with serpents and birds, and ostriches, in bright colors. Handkerchiefs were trimmed with gold lace and sometimes ornamented with a dozen solid gold or silver buttons, which must have been particularly nice for young noses. Sleeves were worn separate from the dresses, and often of different material. Ladies' and children's boots were made with heels two inches high, which were called pantodes, and boots and slippers were frequently trimmed with artificial flowers.

Young lads also wore sleeves of gay colors. Wigs had not, in 1570, become fashionable *for children*, but their hair was often dyed. Garters were worn conspicuously by men and boys, and were a test of rank and fashion. It is on record that these articles, for state occasions, sometimes cost "four score pound a pair," equal to some three hundred and fifty dollars of our money. The tops of boots were of embroidered linen, and shirts were often embroidered in gold thread. In such apparel as this, the school boys of that day played leap-frog and hunt the slipper, and other ancient games.

The beds were the only furniture known, and were frequently of such size as to accommodate from twelve to twenty persons. Thus a teacher could sleep with all his pupils around him. How would you like that, boys? One specimen of these bedsteads, the great bed of Ware—of which Shakespeare makes mention—is still preserved in England as a curiosity, and was, at one time, the property of the late Charles Dickens.

Hashes and stews formed the principal food set before the school children whose mode of life we are depicting, and, as forks were not brought from Italy till 1580, and did not come into general use for fifty years, they ate their stews and hashes with the aid of pewter spoons and—their fingers.

Table linen was unknown, but on feast days narrow strips of Turkey carpeting extended the length of the dining-table, this being the only purpose for which carpeting was used when brought to England. Rushes were scattered upon the floor, and the remnant of each meal was thrown down to the dogs upon these rushes, which were renewed, as history tells us, three or four times a year.

And now, perhaps, you will inquire what were the studies pursued by the pupils of Norwich Academy in the year 1570? Education was esteemed of much less importance than dress and amusements, and, therefore, we mention this topic last of all in our account of the "good old times." The boys were taught "Latin, Greek and figures," but we are told that the young ladies could scarcely read. Embroidery and working tapestry were the principal occupations of the fair sex, and the school girls were taught "to prepare physic and make pastry; to dry herbs and bind up wounds; to make banners and scarfs, and to be obedient to their fathers, brothers, and lords." Knitting became customary, and on the occasion of the visit of Queen Elizabeth to Norwich, in 1570, eight young girls walked in the procession that wel-

comed her, knitting yarn hose, which were then a great curiosity.

Having thus ransacked the annals of the past to bring before you this picture of the olden times, we humbly submit to your consideration, young readers, the question whether our modern boys and girls are not more highly favored, more sensibly dressed, and better educated in every respect in our schools to-day than were the children of English nobles, with all their wealth, power and prestige three hundred years ago?

Quebec Journal of Education.

HIGH-PRESSURE EDUCATION.

MARK H. COBB.

THE attempt to force a quart of any liquid into a pint measure would surely bring the measure to grief. And it would do something more—it would brand him who undertakes it as a fool or a trifler. Were a master workman to send his apprentice to do the heavy work which requires the solid, matured muscle and bone of a man, the public would indulge itself in an indignant outcry against the cruel taskmaster. The verdict in both cases would be just. Every attempt to tax bone, muscle or brain beyond their known capacity is an outrage. The press rings out its vigorous protest against the parsimony which leads railway companies to construct defective roadways and bridges, or to use them without repair until the last straw is laid upon the camel's back and the back breaks. And yet it requires the swift coming of a great calamity to arouse the press and the general public. The stitches drop, one by one, and nobody seems to care so long as the fabric holds together. The world is slow to learn, and the old adage—an ounce of preventive is better than a pound of cure—has been old time out of mind, and the nations have mouthed it as philosophers have written it, everywhere on countless occasions. Still not one man or a woman in a thousand attempts to practice its undisputed wisdom. Underlying all procedure in human affairs is a morbid curiosity to determine—of course at the expense of "the other man"—if like causes invariably produce similar effects.

Thus we are all, big and little, wise and foolish, given to experimental philosophy. There is the man who deliberately puts his foot on the hammer of his rifle and blows into the muzzle to see if it is loaded. After the funeral some other tom-noddy essays the same experiment, and as there is another funeral, we suppose the experiment succeeds. It will succeed nine times in ten. So, also, with the impatient housewife who quickens an open fire with petroleum. One funeral follows another as regularly as the experiment is tried, and still nobody learns anything. Very few believe in the ounce of preventive. We all prefer heroic treatment, and hence prefer the pound of cure. We have been reminded of this phase of human nature very often, but not more forcibly than by the discussion of the proposition to lessen the tasks of school children. We have seen it stated that in some city—perhaps Boston—the experiment of one session a day is being tried in the public schools. It was instituted not very long ago, and as the world has not receded into the thick darkness of ignorance we assume that the experiment has not failed. It may fail. It may be that human intellect, relieved from the constant stimulus of the whip and spur, will degenerate into blank inanity. But we hope the experiment will be thoroughly tried. We have no good reason to doubt that were it possible to apply one of the immense steam hammers at the Baldwin Works to the task of beating the elements of an education into some brains sixteen hours out of the twenty-four, the hammer would have the worst of it. But it is hardly fair to treat the clever and the stupid alike. Some brains will not bear sixteen hours of steam-hammer persuasion, and a great many brains do not very well bear even six hours of such missionary work.

What is the matter with these educators. They do not seem to comprehend that six hours of close application to study is more exhausting than ten hours of manual labor. They seem to proceed upon the hypothesis that a child from six to sixteen must accumulate the information which is to serve the purposes of a long and busy life. The fact runs counter to the theory. Fill the brain of a youth of sixteen as full as is possible of the theories which are only the husks of practical knowledge after all, and what have you done? You have done exactly what you would do were you to compel a child to swallow its breakfast, lunch and dinner at morning meal. The stomach would be disturbed, the whole system clogged, and there would be no assimilation of the food so injudiciously crammed down. And this is the educational system of which we boast! We compel youth to copy the Prodigal Son

in the matter of diet; we fill their minds with the husks of things, and call it education. Like the rude agriculturists of the Orient, we scratch the surface and say that we have ploughed. We dump the seed, chaff and all, and call it sowing; and as that rude husbandman walks between the spires of corn, full robed, and touches none, so we may wander about amid the outcome of modern education and seldom find anything practical to attract our attention, certainly nothing to excite the wonder of any even moderately educated person.

Our educators have to learn—or at least many of them—that books are to a child as crutches to a lame person: aids to progress, and nothing more. If we want to keep a child a mental cripple keep it crammed with the formulas which may be found in books, and that child will limp through life. The topical method is the true method, as has been demonstrated by the best educators in both hemispheres and as can be demonstrated at any time. The truth is that books are for people who do not need them; that is to say, the true custodian of text-books is the practised educator. They will not hurt such persons unless they literally fall down and worship them. But of books there is no end seemingly. And their highest function in many cases seems to be to confuse the growing mind. Were every text-book burned to-day the real education of youth would go on just about as well to-morrow; for the competent teacher is master of the books and knows how to teach others how to be master of books.

Phila. North American.

"WHAT OF THE HOUR?"

WHEN a body of men representing the educational interests of the State are met together, as in the late convention of Superintendents at Harrisburg, we know that we will have an opportunity to form a correct idea of "the situation." Perplexing questions which have been agitated from time to time, will be met and disposed of. If there are some difficulties which do not admit of solution, we shall at least have some light thrown upon them, sufficient to see our way more clearly.

The question of "What should constitute the necessary qualifications of teachers?" occupied a very prominent place in their deliberations; and we understand it to be the sense of the convention, that although a certain degree of proficiency in text-book knowledge is absolutely necessary, there are other weighty considerations not to be overlooked in making up the required standard of a first-class teacher. The ability to impart instruction (which is inborn, where it exists at all), the power to develop the unfolding mental faculties, control the dispositions, subdue the wills, and direct the moral sentiments, are important elements of professional skill.

We want cultivated hearts, as well as heads, in the school-room, and a knowledge of human nature; not only as we find it in the history of great men and women, who are exceptions, and not the rule, but a knowledge of human nature as it exists in society around us. It is the business of the true teacher to manufacture human character out of human nature, to train the minds and educate the hearts of children in such a manner as will render them blessings to themselves and society. We are to educate the moral nature of our pupils as well as develop their intellectual powers; and when we consider a single child, his hereditary nature, his home education, received, it may be, under antagonistic parental influence, his propensities, faculties, disposition, tastes, habits, his out-door surroundings, and multiply by a hundred, bringing these children together in a school-room, is not the teacher's task, under the most auspicious circumstances, a difficult one?

Here comes the test of your science of discipline. How will you proceed? You might as well ask a man how he would play a game of chess? or a general how he would fight a battle? The only answer is—you must be equal to all emergencies; you must have brains to comprehend all the issues, and energies to meet them. Teachers must study for themselves the daily problems which arise, and will find, at least in some schools, that the formula—"Moral suasion equals success" will not fit every case. There must be as many equations as there are unknown quantities.

No two schools can be governed alike; no two scholars are alike. To succeed, you must study the characteristics of the locality in which you labor, study the individual characteristics of pupils, their mental and moral peculiarities of every name and nature, and adopt your method of instruction as well as your code of discipline in accordance with these peculiarities. When the ability to do this is proved in the administration of a teacher, it is of more real value as a qualification for her position, than a technical knowledge of Evolution, Involution or any other intricate relation of numbers. May not a teacher of this stamp possess a permanent certificate, without danger of "rusting out?"

We sometimes fear that the course of instruction in our public schools tends more toward the development of the intellect than the building up of noble character. If this charge is true, we are in error, and ought to correct it. Let us not consider our duty as teachers discharged, until we have established in our pupils habits of obedience to principle; until we have taught them to love knowledge, truth and virtue, for their own sakes, thus rendering them fit for the responsible positions which they will be called to fill, as citizens and members of society.

We are obliged to confess, however, that all effort put forth for the education of the masses will fall short of its desired object, so long as no measures are brought to bear upon the great throng of children outside of the schools, left by their parents to grow up in ignorance and vice. Is it liberty, or license, which permits parents to thrust this class of ignorant legislators upon the community? Does not every parent owe a debt of gratitude to the state, for the benefits and privileges conferred upon his family, which he can discharge only by the return of good citizens to the Commonwealth? The State claims to

protect the rights of all her people. Have children no rights? Is not every child born with the inherent right to an education? If not, why have we a compulsory school-tax in order to provide schools for all? If a portion of the money now appropriated for the building of alms-houses, jails and prisons, were expended in behalf of needy and neglected children, in order to bring them into the schools, the necessity for these institutions would soon disappear, and a higher tone of morals pervade the whole community. M. B. A.

Lititz, Pa.

DECORATE YOUR SCHOOL-ROOM.

A THING of beauty is "a joy forever," is a faithful saying, and we should not lose sight of the import of these words. If we faithfully cultivate the love of beauty and order in our schools, there are those attending them who will carry joy and sunshine to many a dreary home. Some of our pupils have cheerless homes, where the sunshine and warmth of love shed but little joy in the child-life, and filth and passion stunt all the better qualities of youth. These frequently go to school, expecting to learn to read and write, and nothing more. They go to the school-house, sit in the shadow of four bare walls, bleak and cheerless as can be, making the thoughts of rainy days and deep snows a subject of bitter memories. Then the cold mornings, when all are shivering around the cracked stove, filled with sighing boughs or sobbing hearts of elm or maple! Such surroundings chill the most earnest and vigorous, and bring shadows where sunshine should dwell. Look about you, and see what you can do to beautify the house which is your home for the present, and in which you are expected to exercise your best gifts in your capacity of teacher of the young about you.

I am, indeed, most uncomfortable in a dreary, "grimy" house, and I am sure every one is affected by such surroundings; consequently, I make it my first, or introductory, exercise to put everything in order, dusting the rough tables and corners, clearing the windows and ceiling of cobwebs. If you have no pictures ready for the walls, take your pupils into the woods and teach them a little of botany by telling them names of plants and flowers, and have all gather fine specimens of moss, ferns, and flowers, with a few nice green boughs of oak, beech or maple, to hang about your room. Then ask the little ones to bring something to hold your flowers; then plant the ferns in anything that will hold soft, light earth and moss; cover all except the fern-fronds with the light green mosses, and give plenty of water, and you will be surprised at the beauty it affords. Soon you will have to call on the little ones for more glasses and cans, for they love their teacher, and flowers will be a morning offering, filling the old house with fragrance.

If you can afford a nice lithograph to hang on the wall, do so by all means, and ask your pupils for pictures, telling them how to frame them with straws, paste-board or leaves, or any way you may fancy. This gives every one a good opportunity for showing taste and skill. We are often surprised to see how very skilled the little fingers are, and we are pleased to see the scrawling pencil-marks hidden by pleasing pictures. Cultivate your mosses and ferns, and keep the flowers renewed, so the little ones will fancy themselves a little nearer Heaven in your school than they have ever been before. Do not attempt this in one day or one week, but add to your work of art something new constantly, teaching all to look for some new beauty in the woods, fields, brooks, or on the hills.

Common School Visitor.

TEACHERS AND TASKMASTERS.

TEACHING is a peculiar work—peculiar in many respects. It has to do with mind in every condition and stage of development. In the same recitation a dozen minds differing in natural bent and acquired habits test the tact of the teacher to the utmost. The same lesson must be taught to each one, but the manner of impressing it must, to a very great extent, conform to the peculiarities of all. Here the stupid, the shallow, and the apt stand in the same row and claim their portion in due season, and the real ability of the teacher, other things being equal, depends upon the skill and wisdom with which he meets these different cases. And as we look through our student eyes, up to our models, we see them with, perhaps, a distorted vision, and judge them from wrong standpoints. We are apt to magnify the faults and overlook the virtues; and possibly what we magnify as faults are virtues not comprehended. At any rate to us it looks as though this want of *professional tact* is the difficulty over which very many teachers stumble. There is some avenue of approach to the most careless or stupid mind. A teacher should always have before him the nature of the mind upon which he works and the nature of that with which he is working, but this alone will not make a teacher,—he must know how to conduct the operation, how to adapt existing means to desired ends.

Many students usually imagine that when they have mastered the subject matter of a text, they are ready to turn around and teach it; usually such are teachers about as much as one who has studied pictures is a

painter, or one who has studied anatomy is a surgeon; but from this class come many college professors, who learn their trade at the expense of their employers. There is a science of teaching, and there is an art of teaching. It is one thing to have knowledge and quite another to impart it. If knowledge made teachers then all scholars were teachers, and every one knows this is not the experience of scholars. To such an extent has the *tact* element in teaching been overlooked, that many eminent educators have concluded that it is next to impossible to excel both as a teacher and a scholar. When the attention is kept directed towards scholarship, methods of instruction are neglected. Great scholars, or even text-book authors are not usually distinguished as teachers. The golden mean is a model teacher. The common error is that when one has reached high attainments in scholarship, he "forgets the steps already trod" and fails to come down to the level of the pupil's knowledge; they pre-suppose too much knowledge on the pupil's part, and, as a consequence, much of the instruction goes over their heads and is lost for want of comprehension, In their zeal teachers are apt to forget the different mental and physical condition of the learner and bring all indiscriminately to the same requirements, and *marks* become the only test of advancement. Indeed, we have sometimes thought they take pleasure in puzzling students rather than enlightening them—that they get a grim delight from seeing pupils stumble over Greek and Latin roots. But of course this is fancy. The fact is they have been so long familiar with *amo, amas, amat,* or *agathos beltion, beltistos,* that they can't realize the state of one first learning them, and lose patience when a pupil "sticks" on them. Another error is lack of repetition or review. Teaching is a good deal like filling a tooth, a little material must be put in and then—tap—tap—tap, till it is firmly fixed in place. Two-thirds of the class-room instruction is lost from lack of repetition. As a rule teachers should never give an idea to a class without requiring it of them again. If a statement is made by a teacher it should be reproduced by the class until he is certain they have it fixed in their minds correctly. A few points thus drummed in are worth more than all the lecturing of a college course. As a rule, general lectures, whether in school or out, accomplish but two ends, viz.: show the lecturer's attainments, and entertain the listeners. Again, teachers often fail in not comprehending a pupil's difficulty, and only muddle him and waste time by long explanations when a word in the right place would be sufficient. Teaching is drawing out, not cramming in, yet go into some recitations and scarcely a complete sentence is heard except from the teacher. Teachers fall into habits of suggestive or of consecutive questioning which often leave little to the student, except to keep his eyes open and make a little fine calculation as to the part of the lesson likely to come to him.

Teachers are practically converted into task-masters when they make their chief business to assign lessons and hear such a recitation of them as the student can give and then privately mark the result, where it remains in obscurity until the grand aggregate is made at the close of the year. It is the duty of a teacher to first get what he can from a student, but when mistakes are made, or wrong ideas received, the great value of the teacher is realized in clear, timely assistance—and then at the proper time to ascertain the effect of his help.

Teachers in the public schools find it necessary to meet to discuss methods of teaching, to read works on the subject, and to be constantly studying up improved methods. But who ever heard of a meeting of professors discussing "how to teach." They come together to discuss chronology, philology, and even new methods of spelling, but all on the supposition that if they know, they can teach—and with a new supply of knowledge in their brains they take it to mill by the same old road their fathers trod.

—*Campus.*

THE SCHOOL DIRECTOR.

THE common school of the United States was most fortunate in the devices that came to its aid to give shape and direction to the idea which, in its origin and progress, operated as the efficient cause. Of its legal features none were more happily cast or wisely disposed than that of supervision or school management. For the school director is the legal superintendent of the school, and as such is the highest authority on school affairs till his individual powers are merged into a body of members, with equal powers, acting as one.

It matters not what name you give the office, whether "director," "trustee," "commissioner," or "committee," its place and functions in the system are readily recognized, and, wherever found, honored. Every community blessed with a common school is certain to regard with peculiar favor and esteem the person who fills well the office of director. There has never been wanting a feeling that the best and most intelligent men should be chosen to perform its duties. There are few communities in which can not be found men worthy to be entrusted with the office. And there are always those who are willing to give a portion of time—valuable to them, of course, but not the less valuable to society on that account—to the good cause of instructing the youth of the Commonwealth, that cause which contributes much to the Commonwealth as such, in the true sense. There was something profound and wide-reaching in the idea that rested a scheme of national culture on a foundation whose chief cornerstone is the willing citizen, sacrificing his private interests for the public welfare.

And we therefore characterize the office of school director as a most happy device, in every way calculated to secure the objects for which it was created. It has secured them. The history of the common school in the United States is a record of increasing intelligence and virtue. Its movement has been

forward continually, delayed only, if delayed at all, by transverse currents of ignorance from abroad. And the movement will continue despite adverse winds. For the people, at the motion of their own supreme will, are heartily engaged in the work.

The work of public education can hardly fail to enlist the best energies of any one who gives himself to it. Make any thoroughly honest man a school director, and though he were by birth and education unfriendly to the system, on accepting the position (if such an instance be conceivable) there are nine chances to one that he will be converted in the exercise of the duties of his office. The reason is plain. It is found in the character of the work. The common school is an essential good to the people. The man who labors for its support and advancement can but find out the fact that his work is resulting in good. But no honest man, who is unwilling to be converted from enmity to friendship for the common school, will accept the office of school director. There are men, it is true, who will take it at the giving. They will do so as a means to an end. They are schooled to the purpose. Herein lies a great danger. Let not an enemy occupy the watch-tower. In the idea of school supervision was found the occasion of creating the office of school director. There was no other superintendent in the beginnings of the system. He was usually selected from a learned class, supposed to be qualified to control and direct the business of instruction. He was at once director, examiner and instructor.

But the relations of the public school and society have so changed in the progress of both that the office of school director has passed into the hands of citizens regardless of class. With this change, and out of the progressive changes in the character of the system itself, arises a necessity for a new disposition of duties, a division of labor. For education as a business, as a thing to be done, to be done in answer to the enlarging demands of civilization, and in accordance with it, to be at the same time harmonized with and put into right relations with the improving state which provides for its support, and to be carried on with means and appliances suited to its high province, is not less a work of growth, requiring new powers and improved agencies, than any other productive and moulding element of society. This prevailing tendency is finding its way into every school-room. It compels the adoption of rational methods, looks to a "true order of studies," and expects of the teacher a plan and point in the presentation of the particular facts and principles of every subject. The necessary drift of the whole matter is evident. School "keeping," and school visitation and management, have acquired characters which require not only the impartial services of the liberal-hearted citizen as representing the people whom he may serve in the control of the free school, but a supplementary service which no one can give without experience in the school-room, and a training suited to the work. Hence the offices of Principal and Superintendent, which are but complementary to those of Teacher and Director.

The Common School.

HINTS ON SPELLING.

TO know how to spell is chiefly valuable for the purpose of writing. It is of little worth as a means of teaching reading. Says Mr. Calkins in his New Object Lessons, "When taught exclusively from spelling, reading seldom becomes natural, and the pupils frequently stumble all the way through school, calling *was saw, on no*, and making many similar mistakes. Spelling should be learned through reading, not reading through spelling. Reading words naturally precedes spelling words. To teach reading chiefly by spelling belongs to the A B C method. Spelling should not be introduced until the children's eyes have become accustomed to distinguishing the forms of simple words as wholes. Spelling deals with the elementary forms of words, not with their sounds as spoken. The first lessons in spelling, given while the children are learning to read familiar words, should be conducted by printing words on the black-board, and taught by *sight* instead of *hearing*."

The pupils should be taught to spell by printing words on their slates, copying them from the black-board at first, subsequently from books. So soon as they can write let spelling be taught by writing words on their slates. This should be the chief mode of teaching spelling. However, oral spelling may be employed as a valuable means of teaching written spelling successfully, thus causing two senses—sight and hearing—to take cognizance of the elementary parts of each word, instead of only one, as in the common plan of teaching spelling.

The plan of requiring pupils to pronounce each syllable separately while spelling is one of those customs which long usage has so firmly established that it is difficult to look upon any other mode without prejudice. From a long personal experience, and the results of the experience of others with many thousand children, I believe, that, instead of its being an advantage to treat the several syllables as so many separate words, and then unite them together gradually by repeatedly pronouncing the previous syllables as each successive one is spelled, it is a positive hindrance to progress in oral spelling, and a loss of time.

To spell *per'lexity* thus, p-e-r per, p-l-e-x plex, per-plex, i, per-plex-i, t-y ty, per-plex-i-ty, seems to be a sort of "House-that-Jack-built" style, which

may serve as an occasional amusement for children; yet to continue such repetitions daily, as a part of the process of spelling is a needless *perplexity* to pupils, and a great hindrance to their progress in learning to spell. Every requirement that diverts the attention of the pupils from the order and arrangement of the letters that form the word retards rather than aids in learning to spell the word.

The following method has been thoroughly tested and found to be entirely satisfactory for oral spelling: A word is pronounced by the teacher; the pupil repeats the pronunciation distinctly, then spells it, speaking each letter plainly, and making a pause between each syllable, then finishes by pronouncing the whole word, thus: *Teacher*, Commandment. *Pupil*, Command-ment; c-o-m m-a-n-d m-e-n t, commandment. Care should be taken to secure the pause between the syllables, and the speaking of each letter distinctly.

THE late spelling contests were healthy, innocent and amusing. Old and young learned to spell with astonishing ease, for the mind grasps readily and retains tenaciously when excited. This fact can be advantageously employed by teachers in permitting matches in their rooms, say once a quarter in the recitation of dates, localities, etc., as well as in the spelling of words. These contests should, however, never be considered as fair or certain tests of orthographic scholarship. He who wins to-day may lose to-morrow. Let the same contestants *write* the three hundred words, and then pass papers, correct and compare notes, and the result would probably be very different; it would certainly show more exactly their real knowledge.

Good spelling is in part an inherited gift. It is the result of a peculiar power of memory. A scholar of good, sound mind, fine reasoning powers, an excellent speaker, with a wide-awake, intelligent brain, may be so weak in spelling capacity as to miss, after considerable study, eighteen words out of twenty. Such a case has recently come to my knowledge. No amount of study will ever make a good speller of such a person. He must go through life yoked to a dictionary. Let teachers who can spell every word in the language be patient with all such cases. Away with the spelling-book guage of a man's ability! This we say without detracting one iota from the importance of good orthography.

It has also been most exclusively demonstrated, and we record it with pleasurable pride, that amid all the excitement of the *new* studies, viz.: Music, Drawing, Sewing, English History, Natural Philosophy, and oral lessons in Physiology, Physical Geography, Vocal Culture, Mineralogy, etc., etc., the teachers of the public schools have not neglected this old-fashioned study of Spelling. Creditably as the work has been done (judging from the numerous matches in which the children have won the prizes), it has cost an immense amount of time and labor, because the text-books still in common use—ancient relicts of the past—are so defective.

We believe in making the reader and every other text-book, a speller and definer. Great advantage is also gained by requiring pupils to commence their words when writing in columns with *small letters*, unless capitals are required. It is wonderful how easily a considerable knowledge of *capitalization* can thus be imparted. If the teacher habitually deducts merits from the value of every paper examined because words have been misspelled, the scholars soon become extremely careful.

In addition to these different methods, however, pupil and teacher feel the need of an "improved speller" one especially adapted to interest and help the younger scholars, and the one-talented learners of greater age. Most of our spelling-book makers have arranged their words according to a wrong classification. They have grouped together words with similar terminations, or those containing some common peculiarity in spelling rather than in pronunciation or meaning, thus assisting the scholar for the time being, to his confusion afterwards, Words in composition never occur in this beautiful regularity.

FREE TEXT-BOOKS.

A COMMITTEE was recently appointed by the Board of Education, of Watertown, Wisconsin, to examine into the question of free text-books. In their report they present the following facts which are of general value:

In New York City, free text-books have been furnished to the pupils for upwards of forty years; the teachers find by this system great economy of time, attendance of pupils larger, schools more efficient; no dissatisfaction has ever been expressed with the school law on this account.

At Newark, N. J., for the last ten years text-books and stationery have been furnished free to each pupil at an average cost of less than seventy-five cents a year. The attendance was more regular and pupils progressed more rapidly, adding greatly to the efficiency of the schools. The pupils use the books as well as if they were their own.

At Paterson, N. J., free text-books were furnished since the schools were organized. It is found a great saving, and the results of it, in respect to school efficacy, attendance, etc., are excellent. The books are used well by the pupils, and the plan gives general satisfaction. Lost, damaged, or destroyed books must be replaced by the respective pupils.

At Fall River, Mass., all books and stationery have been furnished free to the pupils for nearly four years. The cost under this arrangement was not one-half what it would have been it each pupil furnished his own. The books are now ready on the first day of each term, and the attendance is very much improved. It may seem strange, yet it is a fact, that the pupils take care of the books very much better than if they were their own. The plan gives general satisfaction; informant has yet to hear the first complaint against it.

Lewiston, Me., furnished free to each pupil all the books, stationery, etc., for the last five years, at an average cost of $1.00 a year. This plan has improved the schools in attendance, classification, and is a great saving of time. The citizens approve it.

At Bath, Me., the free-book plan has been in operation these eight years at an expense of about seventy-five cents a year for each pupil. It has served to improve the condition of the schools. The citizens are fully aware of its efficacy, and endorse it. Parents have to pay for wanton destruction of books.

The superintendents of Troy, N. Y.; Trenton, N. J., and Bayfield, Wis., state of their respective places that the free text-book plan is only partly in operation; yet they all agree in believing it a matter of economy, and decidedly favorable to the efficacy of the schools if well carried out.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, JULY, 1877.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

THE STATE ASSOCIATION.

THE twenty-fourth annual session of the Pennsylvania State Teachers' Association will be held at Erie, August 7th, 8th and 9th. The following programme of business has been received from Supt. R. K. Buehrle, of Allentown, Chairman of the Executive Committee.

Last year we met at West Chester, in the south-eastern corner of the State, this year at Erie, in the extreme north-western corner—extremities of the diagonal of our State parallelogram, or of the hypothenuse of a right-angled triangle, just as the reader may fancy, but both of them good places. We had a good meeting at West Chester. Shall we not have one equally good at Erie? The Centennial was the side-show last summer; this summer it is Niagara in its eternal majesty. The teachers of Canada have been formally invited, and this is the first meeting to which delegates have been elected by the County Institutes. The time also of the meeting is opportune, being just one week previous to the meeting of the National Association at Louisville.

PROGRAMME.

TUESDAY, AUGUST 7TH.

10 A. M.—Opening Exercises. Address of Welcome by Supt. H. S. Jones, of Erie. Reply. Enrollment of Members. Reports of Committees. Reception of Delegates from County Conventions or Institutes. Miscellaneous Business.

2 P. M.—*President's Inaugural Address*—Prof. George L. Maris, Principal West Chester State Normal School. *Relation of Colleges to Common Schools*—Dr. Thomas G. Apple, Franklin and Marshall College. Discussion of President's Inaugural and Dr. Apple's Address, on the general subject of Higher Education.

8 P. M.—*Pedagogical Museum*, an address by Dr. S. P. May, of the Educational Department, of Toronto, Ontario, Canada. Discussion of the afternoon continued.

WEDNESDAY, AUGUST 8TH.

9 A. M.—Paper on *Resolutions laid over at West Chester*—Prof. Sensenig, Indiana State Normal School. Discussion. Paper on *Teachers' Personal Culture*—by Prof. Caughey, of Lafayette College.

2 P. M.—*Teachers' Tenure of Office*—Supt. V. G. Curtis, of Corry, Pa. Discussion.

8 P. M.—*The Cultivation of the Imagination*—Mrs. Supt. Rickoff, Cleveland, Ohio.

THURSDAY, AUGUST 9TH.

9 A. M.—*The Educational Problem among the German Element*—Supt. Samuel Baer, of Berks. Discussion.

2 P. M.—*County Institutes*—Dr. George P. Hays, of Washington College. Discussion. Miscellaneous Business.

8 P. M.—Addresses by Distinguished Educators from abroad and by members of the Association.

R. K. BUEHRLE,
Chmn. Ex. Committee.

LOCAL ARRANGEMENTS.

Association will meet at Erie County Court House.

Hotel accommodations can be had at the Reed House and the Ellsworth House at $2.00, $2.50 and $3.00 per day, according to location of rooms. These houses are roomy, under the same management, located near the Court House, and are ranked as first-class. Persons desiring lower rates will please address H. S. Jones, chairman of the local committee.

RAILROAD ARRANGEMENTS.

Persons having orders from the Ticket Agent of the Association, can procure excursion tickets at the principal stations on Allegheny Valley, Buffalo, Corry and Pittsburgh, Belvidere Delaware, Northern Central, Philadelphia and Erie, Pennsylvania, and Danville, Hazleton and Wilkesbarre.

The following will have excursion tickets for sale at the principal stations without orders: Berks and Lehigh, East Pennsylvania, Philadelphia and Reading, Reading and Columbia, and Catawissa and Williamsport.

Persons who pay full fare in going over the Delaware, Lackawanna and Western and Delaware and Hudson railroads, can procure passes at the meeting, to return free.

The Cumberland Valley railroad will sell excursion tickets upon application by letter to A. H. McCulloh, General Agent, Chambersburg, Pa.

SPECIAL.

The Pennsylvania Railroad will run a special train from Philadelphia to Erie and return, if the number who desire to go be 300, at the low rate of ten dollars each.

In order to consummate this arrangement, it is desirable that each person going from Philadelphia shall immediately inform the Ticket Agent, that suitable arrangements may be made.

By a little exertion on the part of the teachers of Philadelphia and the adjoining counties, this number would, no doubt, be readily raised.

The excursion from one end of our noble State to the other, will well repay any teacher who will participate with us.

For orders apply (stamp enclosed), giving railroads and name of stations, and for membership tickets, enclose one dollar with stamp on or before July 24th, 1877, to

J. FLETCHER SICKEL, *Germantown, Pa.*

THE last number of *The Journal*, containing the proceedings of the meetings of the Superintendents, at Harrisburg, has been much commended as of unusual interest. Many of our exchanges have given very flattering notices of it, and numerous letters have been received speaking of it in the highest terms. This is all very pleasant, but we cannot help coupling it with the regret that *The Journal* is read in some parts of the State by a very small number of Teachers and Directors. When we have gone to all the trouble and expense of preparing a feast of good things, we cannot but feel like having it enjoyed. Of the twenty thousand teachers in the State, not more than one fourth or one-fifth have made themselves familiar with the proceedings of these Harrisburg meetings, so vitally related to their interests! Shall not the circulation of *The Journal* be extended? Can Superintendents do a better thing for their teachers than to urge them to place their names on our subscription lists? Ought not Boards of Directors everywhere to take *The Journal?* They can read it themselves and then do good with it by placing it in the hands of the teachers in their employ. Some Boards pay a certain salary to their teachers, and then add to it *a copy of The School Journal.* They think it pays. We believe it does. In any event, however, we mean to make it better and better year by year. If we could double our subscription list, we would double the size of the magazine and increase the editorial force engaged upon it. Will Superintendents, Directors and Teachers help us? A little effort on the part of the friends of *The Journal* among them, and all we ask will be accomplished.

THE seventeenth annual meeting of the National Educational Association will be held in Louisville, Kentucky, August 14th, 15th and 16th In the Department of Higher Instruction, papers will be read upon the following topics: The Study of English as Introductory to Latin and Greek; The Place of English in the Higher Education; American Revision and Adaptation of Foreign Text-Books, and The Dormitory System. In the Department of Normal Schools, the main question to be discussed is, whether Normal Schools should be exclusively professional schools. In that of Elementary Instruction, the claims of the Kindergarten will be presented; and papers are announced on First Lessons in Reading, upon Moral Training in the Schools, and the Essential Idea of Elementary Instruction. In the General Association, papers will be presented on the Silent Forces in Education, the Relation of the High School to the College, the study of Social Economy in Public Schools, and why Drawing should be Taught in Common Schools Discussions will be had on the Educational Wants of the South, and the question of engrafting the Kindergarten upon the Public School System.

THE Teachers' Association of Ontario, holds its annual session on the 14th, 15th and 16th of August, the week following the meeting of our own Association at Erie. The Ontario teachers meet at Toronto. Cannot a party be made up to go to Erie, thence to Niagara, then across the lake Ontario to Toronto, attend the Canadian meeting and return? No more interesting or profitable summer trip could be thought of. Niagara is grand, the ride on the lake is delightful, the Pedagogical Museum and the Schools at Toronto are well worth all the visit will cost, and the Canadian teachers, will, without doubt, extend to their brothers and sisters from the United States a generous hospitality. Who will go?

THE last Congress unwisely reduced the appropriation to the Bureau of Education, from $35,570, for 1875-6, to $30,340 for 1876-7. The Commissioner states in a communication to the New England *Journal of Education* that this reduction will greatly cripple the work of the Bureau during the current year. No provision can be made, without further appropriations, for the display of the educational material donated by Japan, Brazil, Switzerland, Austria, Germany, Ontario, and other countries, at the close of the Centennial Exposition, much less for the establishment of the contemplated pedagogical museum. All this must be done finally, and why should Congress delay action that is so eminently proper in such connection?

THE disposition manifested to cut down teachers' salaries is to be very much regretted. No class of persons are now so poorly paid, considering the time and money it requires to prepare for the business of teaching. True, there are those in charge of schools who are receiving all and perhaps more than all they are worth; but the well-qualified teacher has never been adequately remunerated for his work. To reduce their

salaries is to drive good teachers out of our schools, and to leave them in the hands of novices who will work for low wages. No policy could be worse. Low-priced articles are nearly always the dearest in the end; and this is especially true of teachers. Our wisest course is to employ none but the most skillful teachers, and to obtain such a liberal salary must be paid. We believe in being economical. We believe especially in being economical with public money. But we have no patience at all with that blind economy which drives good teachers with fair salaries out of our schools, and supplies their places with poor ones who will work "cheap."

SUPERINTENDENTS will have a fine opportunity the coming year to raise the standard of qualifications required for granting teachers' certificates. In many counties the number of persons applying for certificates is greatly in excess of the number of schools. It is a wise plan to fix the standard so high that only about enough to supply the schools will receive certificates. The schools will then go into the hands of the best qualified and most deserving teachers. If certificates are given in excess of the number of teachers required, many of those most poorly qualified by some means will force themselves into the schools to the exclusion of others more meritorious but more modest. If, therefore, a superintendent has more applicants for schools than there are schools to give them, his duty is to grant certificates to the best qualified in about the number required. In no other way can he do so much to elevate the profession and advance the interests of the schools under his care.

DR. A. D. MAYO says of the system of teaching adopted in the newly established kindergarten at Florence, Massachusetts, that he has "never seen the spirit of the kindergarten so well preserved in any attempt to transfer its elaborate German formalism to our vital and rapid American social state." Of the teacher he says, "The best thing we can hope for in respect to her, is that she will stick to her own work, in her own best way, and not join the shrill army of combatants that already are making the name of kindergarten a bore to sensible American mothers." And for the benefit of the intolerant advocates of Frœbel's system, who mercilessly excommunicate from membership in the only true kindergarten church all who dare think for themselves in the matter of primary education he adds most aptly: "For we venture to suggest that it is of very small consequence to us, the American people, whether every shred and patch of an elaborate German theory of child-training should be sewed upon our kindergarten; though it may be a valuable thing to appreciate the penetrating insight of a Frœbel into child nature, and in our own way appropriate all his valuable results in the re-organization of our primary school system."

A neat pamphlet containing the catalogue and circular of the Academic Department of the Graded School, Honesdale, Wayne county, has been received. This school has several features worthy of special commendation:

1. Its course of study is very full and complete, including all the branches usually taught in our very best academies.
2. It has a well-selected reference library of several hundred volumes, and a handsome collection of philosophical, chemical and geographical apparatus.
3. The mineral and geological collection contains a large number of valuable specimens. Some of them were presented to the institution by private individuals and others were obtained in exchange from the State Normal Schools at Geneseo, New York, and Mansfield, in this State. We hope the example of the school in this respect will be widely imitated.
4. Non-resident pupils are admitted upon very moderate terms.

The principal of the school is Prof. L. H. Barnum, and the president of the board of directors, C. C. Jadwin, Esq.

THAT part of the Permanent Exposition which is destined to be of most interest is the educational department. This department is now well worth a visit, but it promises rapid growth in the future. There seems to be no reason why it should not contain in due time the very best appliances of all kinds to be found anywhere in the wide world. Our present purpose, however, is to call special attention to a special feature which has been adopted by the "Council of Education." The committee having charge of the subject, of which Prof. Fetter, of the Girls' Normal School, Philadelphia, is chairman, have issued a circular from which we extract the following paragraphs:

In connection with the exhibit of the Educational Department of the Permanent International Exhibition, a room (70 feet by 25 feet, capable of holding 200 or 300 persons, with a platform 12 feet by 25 feet,) has been set apart for the purpose of lectures, teachers' meetings, exercises by classes from schools, showing methods of instruction, etc. The exhibit, as arranged, includes six school-rooms (completely fur-

nished and equipped), displays of apparatus, natural history collections, specimens of pupils' work, etc. To illustrate clearly the best methods of teaching, the "Council of Education" have appointed the undersigned committee to invite such exercises from our schools, public and private, graded and ungraded, city and rural, as will tend to demonstrate more fully than can be shown in any other way improved processes of teaching, and the results accomplished. They would also invite those who have subjects of special interest in the work of education to present, to give their views. The design is to devote two hours on Saturday morning of each week, during the Exhibition, to such exercises, and a discussion of them.

Will you please report to us, at your earliest possible convenience, the names of teachers or others within your knowledge or jurisdiction who are willing to give us a lecture or an exercise with a class? When a class exercise, please send the name of the school, the size of the class, the subject to be taught, and the time (not exceeding one hour) required.

The intention is to arrange a programme, so far as practicable, for the season, so that all interested in education may know in advance the exercise for any specified day. The Board of Directors decided to admit both teachers and pupils of any school free of charge on the day on which a class from their school gives an exercise, provided, they are vouched for by any member of the committee.

In case of a class exercise or a concert requiring more space than contained in the Lecture Room, or needing the accompaniment of the large organ, the Grand Auditorium will be at the service of the school. Tickets of admission must be procured in advance of the chairman of this committee. No charge will be made for the use of organ.

MR AARON GOVE, Superintendent of the schools of Denver, Colorado, has written to several educational papers urging teachers to make a summer trip to the Rocky Mountains. In one of his letters he says:

"To many of our profession, the pleasure of such a journey would exceed that of a short continental tour, while to all the physical returns would be immeasurably greater. The exhilaration of a few weeks' life at an altitude of from eight to fourteen thousand feet, the excitement consequent upon hunting, fishing, and exploring in this pure, dry atmosphere, even to one whose home is as high as Denver, imparts an invigoration that reaches well into the succeeding year, and lightens thereby the burdens of duty.

In parties of ten, Mr. Gove thinks that the trip can be made from Boston to Denver and return, including all the expenses of three weeks of camp life among the Rocky Mountains, for the sum of *one hundred and sixty dollars* each. He recommends tourists to go to Denver, and there make arrangements for the trip to the mountains. He gives the following practical advice in regard to equipment:

Hire a man with his team; he has a large wagon covered with canvas,—a prairie schooner,—a ship of the desert. He will go with you: some of the party can ride; he will drive wherever you wish, stop whenever and wherever you direct, and charge you four to four and a half dollars a day. He will feed his horses: you must feed him. Such men are always at hand, and are familiar with the roads and the life. Rations must be purchased, coffee, sugar, rice, hominy, canned goods, smoked meats, etc., to an amount proportioned to the time to be spent, always remembering that appetites are increased in a mountain camp-life fourfold. It is possible to make this part of the outfit expensive; but the goods wanted can be bought almost as cheap in Denver as in New York—some of them cheaper. I have camped three weeks at an average daily expense for food of less than one dollar. Fish and game form a good share of one's food, and they cost naught but pleasure. A few camp-kettles, a bake-oven, and a small V tent are needed. The latter can be bought in Denver.

What ten Pennsylvania teachers have the time and money to spare to take this delightful trip?

COMPULSORY EDUCATION IN OHIO.

THE last General Assembly of the State of Ohio, passed a law relating to attendance at school, which is attracting considerable attention. We give below an outline of the provisions of this law, together with some comments upon them.

Section first provides that all children in the State of Ohio, between the ages of eight and fourteen years shall be sent to school for at least twelve weeks in each school year, at least six weeks of which time shall be consecutive, unless excused by the local school authorities, by reason of unfit bodily or mental condition; their labor being required by indigent parents, brothers or sisters; having already acquired the amount of education contemplated, or living at the distance of two miles or more from the nearest school.

Section second provides that children shall not be employed unless they can show that they have attended school for the required time or been excused therefrom, as provided in section first. Children dependent on their own support are exempted from the operations of this provision. Children can be employed only for forty weeks in each year.

By section third, school boards are directed twice in each year to ascertain the condition as to education of all children in their respective districts under fourteen years of age. All violations of the law are to be reported to the person authorized to prosecute the offenders.

The remaining sections of the act are given in full as follows:

Sec. 4. In case it shall be shown to the satisfaction

of the Board of Education having control, that the parent or guardian has not the means wherewith to purchase for his child or children the necessary school books to enable him to comply with the requirements of this act, such Board is hereby authorized to furnish such books free of charge, the same to be paid for out of the contingent funds at the disposal of such Board of Education.

Sec. 5. In case any parent, guardian, or other person shall fail to comply with the provisions of this act, said parent, guardian, or other person, shall be liable to a fine of not less than two dollars nor more than five dollars for the first offense, nor less than five nor more than ten dollars for each and every subsequent offense. Such fine shall be collected by the Township Clerk, or in case the school district in which the offense is committed is situated within a municipal corporation, then by the Clerk of such corporation, in the name of the State of Ohio, in an action before any Court having competent jurisdiction, and the fine so collected shall be paid to the County Treasurer, and by him accounted for as other money raised for public purposes, and said money shall be applied to the use of the common schools of the district in which said offense was committed.

Sec. 6. It shall be the duty of the Township Clerk of the municipal corporation, as the case may be, as provided for in Sections 3, 4, 5 and 7 of this act, to prosecute any offense occurring under this act, and such Clerk neglecting to prosecute for such a fine within fifteen days after a written notice has been served on him, having been notified by the affidavit setting forth the facts by any member of the School Board or any tax-payer within the school district in which the offending party may reside, such fine to be collected in the name of the State of Ohio, in action before any Court of competent jurisdiction by any person feeling aggrieved thereby.

Sec. 7. Two weeks' attendance at a half-time or night school to be considered within the meaning of this act equivalent in an attendance of one week at a day school.

Sec. 8. This act shall take effect and be in force from and after the first day of September, 1877.

This Ohio law has some good features, but we say frankly that we do not expect to see it answer the end of its enactment. It is too weak in places to be enforced, and, if otherwise, the means of enforcing it are inadequate. Among the weak places in the law are the following:

1. The excuses for non-attendance at school will be found in the hands of a school board, constituted as ours, are to cover about all the cases that can arise under the law. It can be made to appear that the time and labor of at least nine out of every ten children who are not at school are necessary to their own support or to the support of indigent relatives. 2. There is no penalty imposed by the law upon school boards who fail to perform the special duties enjoined by it. 3. The law imposes no penalties upon manufacturers and others who employ children for a longer time in a year than forty weeks. 4. It authorizes the furnishing of school books to indigent children, but food, clothing, shelter, are quite as often needed.

This Ohio enactment is radically defective in this, that, if in indigent circumstances, it permits children to grow up in entire ignorance; and, in this, that it makes no provision for the thousands of homeless, friendless, vagrant little ones that are becoming so numerous in our cities and towns and beginning to spread out into the country districts. It may accomplish a little good, mainly by the agitation of the subject it will provoke; but it does not begin to reach the root of the evil it is intended to cure, and will, in a few years, either be repealed or die a natural death on the statute books of the State.

MIDDLE-GRADE EDUCATION IN ENGLAND.

THE Marquis of Hartington distributed the prizes and certificates granted during the last local examinations conducted by Oxford University at the London, Southwark, and Streatham Hill centres. In the course of his address he said:

Neither Government nor Parliament has hitherto considered it necessary to take steps for securing the effectiveness of the endowed and private schools which are mostly attended by the great middle class of the country, although both the primary and the highest schools have been thoroughly provided for. I am far from saying that this is a culpable neglect. In this country we have been long accustomed to consider that private enterprise and energy, uncontrolled by any official superintendence, are able to produce as good—nay, perhaps better—results than can be produced by special governmental care. Still, intermediate education in our private schools should not be left wholly to itself, while both the highest and the lowest forms of education are diligently inspected and results reported to Parliament. It is not the case in all countries. In Germany the State has provided for the examination of students about to leave the intermediate schools; and this examination is, I believe, compulsory upon all persons seeking any kind of public employment. Here, while the government has taken no steps of this kind, the Universities have voluntarily attempted to raise the character of the intermediate schools by means of these local examinations which have been held now during 18 years, and the reports show that they have produced a decided improvement. And yet it is evident even from the very last report that there is still room for improvement. Whether the Universities can fully accomplish the wished-for result is a question difficult to answer, but their own action affords a guarantee that what they undertake to do will be thoroughly done. University mintage is genuine coin."

The government aids these local students by permitting their exercises to pass through the mails at book-rates. This enables a great many diligent students—aspiring youths of both sexes from the poorer classes—to study at home. These "home students" send their essays, etc., to volunteer "seniors" who correct and direct their work,

and from among these there is a large percentage of successful candidates at the annual local examinations. The University of Edinburgh directly aids such students through the mail, but has no local examinations; all must go up to their *alma mater* to compete for certificates or degrees. So much for English practice. We, here, could save to our country's use "full many a gem of purest ray serene," if our postal laws would allow our secluded but eager country youth to send their exercises for criticism and correction at third-class rates. The department would lose nothing by such a concession while it would be a saving of the best heart's-blood of the republic.

Lord Hartington is the present leader of the opposition party (liberals) in the House of Commons. Yet he can find time for the lowly and unpartisan work of aiding at an examination of competing students. Our leaders are perhaps more busily occupied, but let us hope that they will provide for American youths at least as liberal postal facilities as have been granted and are eagerly accepted by ardent young students abroad. *

STUDY.

ITS OBJECTS, REQUISITES, AND MEANS.

THE following is the fourth of a course of lectures recently delivered by Prof. F. A. Allen, of this state, at the Hampton Institute, Virginia:

Objects of Study
1. To train the mind.
2. To teach how to think.
3. To enable us to arrange and classify our knowledge.
4. To enable us to converse.

The business of the teacher is to train, develop and discipline the powers by which we obtain knowledge.

As to classification of knowledge, instead of giving the pupil in spelling a book to study his spelling lesson, it would be well often to give him a paper and pencil, and have him put in one column the names of all the trees he can think of; in another the names of the different kinds of fruit-trees; and so on, with the names of things to eat, of things to wear, of furniture, household utensils, flowers, etc. A spelling book made on this plan would be the best kind of spelling book. Besides teaching how to spell words most in use, it would help the pupil classify and arrange his knowledge, making it clearer and more easily retained than a mass of unassorted, unassociated facts can be.

As one object of study is to converse well, require the pupil to give his answers in good, pure English that expresses what he means. Correct his *own* bad grammar and inelegant English, not somebody else's. There will sometimes be found in school books long lists of bad syntax for the pupil to correct. Now, if these are not mistakes that he is in the habit of making, they will only put new errors into his head. You want to correct *his* bad grammar,—so watch for *his* mistakes, and let him watch for them himself. Again, make him incorporate your questions in his answers, to show that he understands them. For instance, you ask him, What is the capital of Virginia? His answer should be, The capital of Virginia is Richmond. That will accustom him to the use of the word capital and secure his understanding of it.

Requisites of Study.
1. Health.
2. Pure fresh air.
3. Comfortable seats.
4. Time.
5. Comparative silence or regulated noise.

The first requisite of study is, of course, Health, and for this plenty of good, pure air is absolutely necessary. All school rooms must be ventilated in some way. Arrange your windows to lower from the top. If they won't, make them, by whittling the piece across the lower sash. It is a good plan to have a little stick and string nailed to the side of the window to allow the pure, fresh air to sweep through the school-room occasionally.

The children should also be comfortably seated. If the seats are perfectly perpendicular, too high or too low, or the desks flat on the top, the pupils will soon be weary and cannot be studious. By cutting off the back legs an inch or two shorter than the front ones, you can make the seats comfortable, and the children will not lounge forward.

Have a time for a study period immediately after each recitation. Then the pupil will have fresh in his mind what you should have told him about studying his lesson for the next day, and can go right at it with interest. Remember, a child cannot recite to you what he has not learned. He must have time to learn it. *The smallest amount of time* a child should have for studying a lesson is as much time—or better, twice as much time—as it takes to recite it.

The next requisite is *comparative silence, or regulated noise.* Remember, you cannot have absolute silence, and you don't want it. Where there is life there is motion; where there is motion there is friction; where there is friction there is noise. A silent school is a dead school. The question is not, How still can the school be kept? but how still to get the most study. *It is not the minimum of noise, but the maximum of study that we want,*

Means to secure Study.
1. Compulsory study worth little.
2. Study to be valuable must be spontaneous.
3. Appetite.
4. Devices to make study attractive.

Compulsory study is not study. It must be spontaneous to be valuable. Therefore we must make it appetizing, attractive, and sometimes use our best skill to rouse and interest the children.

A dull, warm day can be made more interesting and lively by various little devices which each teacher can best make for himself. Take them out botanizing or show them experiments in natural philosophy. The pressure of the air can be demonstrated in a simple way by a tumbler full of water covered with a sheet of letter paper, then inverted

when the water will be held up in the tumbler by the upward pressure of the air against the paper. In Hooker's "Child's Book of Nature," Grey's "How Plants Grow," and Miss Youman's "Botany," you will find good suggestions for such devices.

SIGNIFICANT MOVEMENT IN ENGLAND.

WE learn from the *Educational Times*, London, that memorials were recently presented by the "College of Preceptors" and a conference of "Head Masters" to the Universities of Oxford and Cambridge, asking them to found Chairs of Education for the benefit of those who are preparing to teach. The significance of the movement consists in the fact that the petitioning bodies are composed of the leading teachers of England, and the bodies petitioned are the old, conservative Universities of Oxford and Cambridge.

The Council for the College of Preceptors state, in their memorial that they "feel that it would be of immense advantage to the education of the country, if the great and historical universities should decide to founds Chairs of Education; so that courses of lectures, not necessarily by one professor, might from time to time be delivered, with the result of saving young teachers from serious mistakes, and from great waste of power, and of enabling them to start, at the very outset of their life's work, with a better method and a less imperfect knowledge of the Art of Education." And further, that "the benefit which the Universities might thus confer upon the country would be of the greatest value, if teachers, who might not happen to be members of the Universities, were admitted to attend short courses of lectures on the science and art of education; a mastery of which, tested by examinations, would carry a certificate. The wide field of usefulness open to the Universities in this direction will be apparent from the last census returns, where the number of teachers is given as 158,000, a number far exceeding that of any other recognized profession in this country."

The Committee representing the Conference of Head Masters close their memorial by saying that, "the Universities are the acknowledged heads of higher education in this country. We venture to think that, in this position, they have special means for providing the kind of training required, and are also the fittest authority to test the qualifications of teachers, and to issue a certificate or diploma which shall be likely to command general confidence."

The *Times* takes the matter up editorially, and below we present in full the article on the subject. It is clear, from this whole proceeding, that in England they have reached the conclusion that the science and art of education are things to be taught, and learned and tested like other sciences and arts.

In another column will be found copies of two memorials which have been addressed to the Universities of Oxford and Cambridge, advocating the establishment of Chairs of Education. The first of these is from the College of Preceptors, and the second from the "Head Masters' Committee." The former, therefore, represents a large body of teachers, in whose name it speaks, and in whose interests it has acted for more than thirty years. The latter, signed by the Head Masters of Canterbury, Clifton, Haileybury, City of London, Liverpool, Marlborough, Sherborne, Shrewsbury, and Uppingham, represents the opinions of that very important association, the Annual Conference of Head Masters. The memorial of the College, speaking with the authority of a body which examines annually some 4000 candidates for certificates, drawn from nearly 300 schools in England and Wales, points to the immense advantages which the great and historical Universities could confer upon the advancement of education, were they not only to establish Chairs where scientific methods of teaching would be set forth and illustrated, but also to admit to their professional lectures young men intended for the teaching profession who were not members of the Universities. And since the number of teachers is, according to the last census returns, 158,000—a number far exceeding that of any other recognized profession in this country—it is obvious that there is a wide field for the action of the Universities in giving the coherence and organization of an academic stamp and culture to so vast a body of educated men.

The Head Masters' Committee call attention to the fact that professional training for higher grade teachers has for some time past been the subject of discussion at the Conference; that in 1870 a declaration was framed to the effect that a system of training in the art and practice of teaching for teachers in schools higher than elementary would be of service to education; that this declaration was signed by two hundred actual or former Head and Assistant Masters; and that what is wanted to insure the attendance of intending teachers at a course of University lectures is the prospect of obtaining a certificate or diploma likely, as they put it, "to command general confidence," or, as we may put it, likely to be of commercial value.

We are not altogether sanguine as to the result of these memorials. There are, it is true, already two Chairs of Education in the country, that of St. Andrews and that of Edinburgh; and such Chairs are also common on the Continent; but the dislike of the old Universities to change until it has become absolutely necessary, is so rooted that these examples by themselves would probably have but little weight. There is, however, some chance that a measure so recommended will command a certain amount of respect. Now, respect is a great thing to obtain. When about three hundred middle-class schools,

with two hundred teachers connected with our first public schools, unite in advocating the same step it is clear that there must be "something in it." Out of the three or four hundred men who every year take an honor degree at Oxford or Cambridge, more than half take up with teaching as a profession. The Head Masters' Committee thinks of these beginners; the College of Preceptors goes wider afield, and thinks of the hundreds of young teachers who have been unable to get the advantage of University education; and both unite in making the same demand.

The main point is clear, that we *must* have somewhere these Chairs of Education. Will the old Universities strengthen their hold on the higher education, and acquire a stronger influence over the lower, by the establishment of such Chairs, or will they be content to let others do their work? Their *prestige* is so vast, their power is so great, that were they to take the step advocated the whole battle would be instantly won. It is to Oxford and Cambridge that we must look for the definitive establishment of the principle that teaching is a profession. At one time it was hoped that the Government might take up the question, but that hope has proved fallacious. Nor, indeed, considering the enormous endowments of higher education in this country, and the large annual vote from public funds for primary teaching, can we hope for Government assistance. If Oxford and Cambridge will not come to our help, we must try in some other quarter, pehaps found our hopes on the Scotch Universities. It seems to us that here is a grand opportunity for our old time-honored seats of learning, without any real change, to adapt themselves still more closely to the wants of the time. Let professors of teaching give lectures at our ancient and historic Universities; let the thousands of teachers—besides those whose names are on their College lists—be invited to attend the lectures; and let some kind of certificates be bestowed, after due examination held, which will testify to the holder's ability to perform the functions of a schoolmaster. It would take a very short time to show that these certificates possessed a high commercial value, and that their holders could command places of good position and high emolument. Indeed, we can see no reason whatever why we should not go a step farther, and ask for a special degree in Education. There are Doctors of Law, Doctors of Science, Doctors of Literature, Doctors of Music, Doctors of Medicine, Masters of Arts, and Masters of Surgery. Why, in the name of common sense, cannot we have Masters of Education—that profession and that science which is the foundation of all other professions and all other sciences?

Obituary.

JOHN C. HOY.

THE Mifflinburg *Telegraph* comes to us in mourning on account of the death of Mr. John C. Hoy, the late Principal of the public schools of that place. Mr. Hoy was a graduate of Union Seminary, New Berlin, and had taught in Mifflinburg about a year, first in the secondary department, and subsequently as Principal. He had much to do in securing the construction of the fine public school-house recently dedicated with interesting exercises. He was quite ill from the day of the dedication to the time of his death, which was caused by hemorrhage of the lungs. Mr. Hoy was greatly respected, both as a teacher and a citizen. The *Telegraph* contains affectionate tributes to his memory from school board, teachers, pupils, and the Young Men's Christian Association.

PETER MCMANUS.

CARBON county recently lost one of its best teachers in the death of Peter McManus. Mr. McManus taught in Banks district. The District Teachers' Institute, of which he was an active member, passed appropriate resolutions in commemoration of the sad event.

BOOK NOTICES

HOW TO TEACH *According to Temperament and Mental Development, or Phrenology in the School-Room and Family. By Nelson Sizer. New York: S. R. Wells & Co., 737 Broadway.*

"An attempt is made in this work," says the author in his preface, "to aid parents and teachers to understand the talents and dispositions, as well as the constitutional temperaments of those committed to their care, and to point out a more successful way to guide, control, and educate them." All rational teaching must be based upon the nature of the being to be taught. The first step in the work of the teacher should not be to select text-books, assign lessons and hear recitations, but to make a most careful diagnosis of the physical, intellectual and moral conditions of his pupils. This done he is prepared to commence the work of instruction and training. That a teacher must understand the general science of human nature, as well as the special characteristics of the individual pupils committed to his care before he can enter upon the work of teaching wisely, is a proposition so obviously true that it seems to need no argument in support of it. Attempts to teach without the guidance of this principle, it is not too much to say, are all guess-work, empiricism, quackery. True, such attempts at times meet with partial success, but it is the success of the blind leading the blind. Mr. Sizer sees clearly the principle that underlies all teaching, and his book is an elucidation of it from a phrenological stand-point. No teacher or parent can read it without being profited. Several chapters of the book were published in this journal while it was passing through the press. Those who read these specimens will know how to appreciate the whole. W.

A MANUAL OF ENGLISH HISTORY. *For the Use of Schools. By Edward M. Lancaster. Pp. 320. New York: A. S. Barnes & Co. Price, $1.40.*

This hand-book has been carefully prepared by the author "to meet the wants of those schools whose limited time forbids an extended course of study." The most important points of English history are

treated topically, in so concise a manner as to render the book very satisfactory. While the style is simple and terse, the language is clear and direct, without the slightest taint of rhetoric or any tendency to diffuseness. We regard it as the very best book of the kind we have ever seen, whether for an elementary class in school, or for the private student who is a beginner.

ANECDOTES AND HUMORS OF SCHOOL LIFE. *Illustrative of the Character, Habits, Doings and Sayings, Wise and Otherwise, of Teachers and Scholars in Ancient and Modern Times. Edited by Aaron Sheeley. Pp. 350. Philadelphia: Claxton, Remsen & Haffelfinger.*

Here we have brief incident, lively anecdote, and the flash of wit in keen repartee. The articles are of necessity brief, varying in length from a few lines to one or two pages. The reader familiar with books and current newspaper literature, will find many things that he has seen before, but, we think, still more that he has never seen. He will probably sit down, as the writer has done, turning the leaves and laughing over old things and new, until, to his surprise, the evening is gone. This compilation, which is the only one of its kind we know of, is worthy a favorite place in the library of the teacher or of the general reader. It is issued in sumptuous style, and we congratulate the editor, Mr. Aaron Sheeley, County Superintendent of Adams, upon the publication of what deserves to be a very popular book.

MEMOIRS OF MISS HENRIETTA B. MILLER, *late Teacher of Fairview School, who died at Waynesboro, Pennsylvania, December 23, 1874. Waynesboro, Pa. Published by the author.*

The *School Journal* for April, 1875, contained a notice of the death of the lady whose Memoirs have just been placed in our hands by her father. The book is a little volume of one hundred and sixty pages, full of affectionate reminiscences, and containing the record of a life rich in all the graces that can adorn humanity. Miss Miller was much devoted during her life to the cause of education. She had been assistant teacher at Linden Cottage Female Seminary, Reading; and subsequently taught for several years a public school near the borough of Waynesboro, Franklin county. Here she won a fine reputation as a teacher, and seemed to be entering upon a career of great usefulness when she was called away. The Memoirs contain much that would be serviceable to parents and teachers in the work of training and instructing the youthful mind, and we recommend the book accordingly. It would also be a very suitable book for a Sunday-school library. W.

ELEMENTARY CHEMISTRY: *A Text-Book for Beginners. By S. F. Peckham. Pp. 254. Louisville, Ky.: John P. Morton & Co.*

This handy volume is a simple and easy introduction to a science which is every year receiving more attention among those who desire to make themselves acquainted with the constitution of the world in which they are placed, and seems to us exceedingly well adapted to the wants of beginners. It is in the form of easy and natural conversations betwen an uncle and his niece and nephews. During the progress of these conversations the technical terms of the science are introduced, one by one, in conjunction with frequent experiments, which any careful person may perform with little expense; and thus a general survey of the whole field is taken, and the study made practical. The constituents of matter are carefully described, which naturally leads to the analysis of compounds; and such subjects as "Absorption," "Soil as a Source of Food for Plants," "Ashes," "Animal Nutrition," and "Respiration," are discussed in a familiar way which must be very satisfactory to those who desire real knowledge on these points. We can recommend the book heartily.

AN ELEMENTARY GEOMETRY. *By William F. Bradbury. Pp. 240. Boston. Thompson, Brown & Co.*

Of this treatise the author, in his preface, says: "The *direct* method of proof has been used in propositions usually proved by the indirect," which is certainly an improvement; and we observe that in the famous Pythagorean proposition he has materially abbreviated the reasoning by substituting proportion as the basis of this demonstration, and that without any sacrifice of clearness. He also claims credit for "special originality" in the treatment of various other propositions and the use made of certain definitions and consequent discussions in subsequent demonstrations. "Numerous practical questions illustrative of each book, and theorems for original demonstration, are introduced," furnishing a wide field for the exercise of the ingenuity of the student.

A LATIN GRAMMAR. *By B. L. Gildersleeve. Pp. 384. University Publishing Company. New York and Baltimore.*

The multiplication of text-books in all departments of study indicates an enormous demand in the country for works of this character. The Latin grammar whose title stands at the head of this notice is one of the best we have seen. There is, perhaps, very little that is especially original in the treatment of the subject, in this volume, but the arrangement is thoroughly good, the statements are concise and yet clear and sufficient, and the great number of original and pertinent examples under the different rules of Syntax, of themselves constitute a very good introduction to the study of the Latin authors.

CHAUCER: *The Tale of the Man of Lawe, The Pardeneres Tale, The Second Nonnes Tale, The Chanonnes Yemans Tale. Edited by the Rev. Walter Skeat. Oxford.* Price, $1.75.

We have received from Macmillan & Co., 22 Bond street, New York, a copy of this standard work, which needs no recommendation to those who are familiar with the labors of the editor in the field of ancient English literature. The volume contains a treatise on pronunciation, and a copious vocabulary of the archaic forms found in the Tales whose titles we have given. We can cheerfully recommend it to those who wish to make themselves better acquainted with our mother tongue in its earlier stages.

POPULAR SCIENCE MONTHLY SUPPLEMENT. *Published by D. Appleton & Co. New York.*

In a late number of *The Journal* we recommended to the teachers of Pennsylvania the scientific magazine of which the publication whose title is given above is a monthly supplement. The publishers say, as the reason for commencing this additional issue, "So many excellent things were constantly slipping by us for want of space—so many sterling articles by the ablest men of England, France and Germany, which our readers would prize and have often called for—that we see no way of making our work effectual and meeting the new demands, but by printing supplements to our regular issues." The price of the Supplement will be $3.00 a year, separately, but subscribers to the Monthly may receive the two publications, post-paid, for $7.00.

SOUL OR FORM.—In connection with that most beautiful composition, Gottschalk's "Last Hope," the following touching anecdote is related: While in Cuba, he was the guest of a lady who was an invalid. Her disease, an incurable one, was very much aggravated by anxiety regarding her son who was absent. The greatest relief she found was in listening to the playing of the incomparable pianist, who was making his home beneath her roof. One evening when she was suffering more than usual, she suddenly exclaimed, "Oh, for Heaven's sake, play me something!" Gottschalk took his seat at the piano, and improvised the beautiful melody we have mentioned. As he brought out one thought after another, the idea took possession of him that he was playing his last piece for his afflicted friend. The next day he departed for another part of the island. At the expiration of a week he returned. As he gained the summit of the hill near the town in which she lived, he heard the bell of the little church tolling for a burial. Soon a turn in the road brought him in sight of the church, and winding up the pathway was seen the funeral train. His heart's foreboding had been realized, and his dear friend had, indeed, passed away. Recalling the melody he had played for her on their last meeting, he arranged it, and named it the "Last Hope." Always after, when playing at private soirees, or for friends, he finished his performance with this lovely meditation. Being on one occasion asked the reason for this, he gave

THERE'S MUSIC IN THE AIR.

From "SILVER LUTE."
Per. JOHN CHURCH & Co., Cincinnati.

Moderato.

1. There's mu-sic in the air When the infant morn is nigh, And faint its blush is seen
2. There's mu-sic in the air When the noontide's sultry beam Reflects a golden light
3. There's mu-sic in the air When the twilight's gentle sigh Is lost on evening's breast,

CHORUS. 2d time *pp*

On the bright and laughing sky. Many a harp's ec - stat - ic sound, With its thrill of
On the distant mountain stream: When beneath some grateful shade, Sorrow's aching
As its pensive beauties die. Then, O! then, the loved ones gone Wake the pure ce-

joy profound, While we list enchant - ed there, To the mu - sic in the air.
head is laid, Sweet-ly to the spir - it there, Comes the mu - sic in the air.
les - tial song, An - gel voic - es greet us there, In the mu - sic of the air.

the explanation related above. Is it strange that a composition inspired at such a time, a whispered message from the life beyond, should have become one of the undying pieces of our day? We have frequently met with pianists, we beg pardon, piano manipulators, who boasted this piece as one of their collection. We have heard them play it, and although every note was clear and distinct, and the time faultless, the performance was no more effective or inspiring than one of Czerny's velocity studies. Another player with far less executive ability, but vastly more *soul*, would melt the hearer in tears with the same piece. The one sees only the notes; the other goes deeper and reads a hidden meaning.

Our pianists and organists seem often in danger of their souls; and when a man cannot feel the spirit, the real æsthetic life of music, he has lost his soul. The tendency of the teaching of the age, is to make a mere intellectual matter of everything. And when we bring this idea into music, we degrade it to our own material level. Not that we would pretend to deny that music is subject to the same laws of order that govern the universe; and to have our music what it should be we must understand those laws of divine order. But in pursuing this intellectual study, we must not lose sight of the more interior, affectional element in the art, a mysterious something that cannot be taught, cannot be studied, but of which every *musician* is conscious, for it is that which gives him his rare power over an audience. Music should be esteemed in proportion as it elevates the heart and refines the life.—*Vox Humana.*

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PEDAGOGICS ABROAD.—II.

AN EDUCATIONAL CHAPTER FROM TAINE'S NOTES ON ENGLAND.*

HARROW, Eton, Rugby, are among the principal establishments of secondary instruction in England, and correspond nearly to our large lyceums. There are at Eton about eight hundred boys, and five hundred in each of the others, from thirteen to eighteen years of age. But between these schools and our lyceums the difference is enormous, and no other comparison gives greater prominence to the contrast between the two nations. They tell me that I may take Harrow as an example.

This is an independent, private establishment, receiving no aid from the State, originally founded by a legacy, and, consequently, provided with a landed estate and an hereditary revenue. Sometimes the revenue of such a property is very large. At Harrow it is small (£1,100). Large or small, it is administered by a body of trustees, who are renewed by election. Here there are six, great lords and proprietors of the neighborhood, who are empowered to make considerable changes, and to appoint the head-master. But the principal part of the machine is the staff of under-masters, each of whom undertakes a course—Greek, Latin, French, Mathematics, etc.—and, besides, lodges and feeds in his house from ten to thirty boarders. When there are only a dozen of them, he has them eat at his own table, with his family. Sometimes, when they are more numerous, they eat at two tables, presided over by the ladies of the house. Usually, there are two in a room. The largest have a room to themselves. Thus, the child, transplanted into the school, finds there a likeness to the paternal mansion—the more so, because families are so large in England. He has his room; he dines three paces from a lady; he lives in a natural social position, and is not, as among us, subjected to the communism of a barracks.

Another difference: Among us a lyceum is a large box of stone, into which one enters through a single opening, provided with an iron gate and a porter. In the interior are some courts resembling yards, sometimes a wretched row of trees to compensate for plenty of walls. As this stone structure is always in a great city, the young man who passes without the grating does not find beyond any more than within it anything but stone and brick. Here the school is in a little town, with a hundred free openings into the country.

At Eton, around the old central court, I saw roses, ivy, honey-suckle climbing everywhere along the buildings; beyond are rich meadows, wherein huge elms spread their venerable branches; close to them is a green and shining river; on the water are swans; upon the islands cattle ruminate; the current winds and disappears towards the horizon amidst the foliage.

* Translated from the French by JAMES HAROLD WICKERSHAM.

At Harrow the landscape is less pleasing, but verdure and the open air are not wanting. A meadow of ten or twelve acres belongs to the school, and is used for the play-ground. I met little boys in black jackets, the big ones in black coats—all crowned with a small straw hat, not only in the town, but out of the town, along the hedge-rows, on the banks of the pond, their muddy boots showing that they are always on the roads or in the wet meadows. Thus, while among us the season of youth is spent under a bell-glass, through which penetrates the moral and physical atmosphere of a capital, among them it is spent in the open air, without imprisonment of any sort, in the constant companionship of fields, of waters, and of woods. Now, it is a great point for the body, the imagination, the mind, and the character to be developed in a position healthy, calm, and conformed to the mute exigencies of their instincts.

On the whole, human nature is here allowed freer play and is less affected by this education than with us; the children resemble the trees of an English garden; while ours might be compared to the clipped and leveled yews of Versailles. For instance, here, the children are almost as free as students; they are compelled to attend classes, lessons, dinner, and to be in at the appointed hour in the evening, nothing more; the remainder of the day belongs to them, to employ it for themselves as they may desire. The only charge weighing upon them during these hours of freedom is the obligation to perform the prescribed task; but they may do it where they please and when they please; they work in their rooms or elsewhere. I have seen some studying with the librarian, others reading seated on the balustrade. They follow their taste, wander where they wish. They are to be seen on the streets, at the pastrycook's, in the cook-shop; they scour the country, fish, skate, swim, go birds'-nesting. They are masters of their time and of their money also, give themselves treats and purchase ornaments for their rooms. It appears that if they get into debt their little private furniture is sold to the highest bidder. They have the privilege and the responsibility; it is curious to see youths of twelve elevated to the dignity of men.

Eight hours work daily is the maximum, most frequently six or seven; with us eleven, which is unreasonable. The young have need of physical movement; it is against nature to oblige them to be pure brain, sedentary cripples. Here athletic games—tennis, foot-ball, races, boating, and above all, cricket, occupy a portion of every day; in addition, two or three times a week, the classes are suspended in the afternoon in order to give place to them. Self-love is mixed up with this, each school endeavors to surpass its rivals, and sends to the trial of strength, oarsmen and players carefully trained and chosen. Harrow beat Eton last year, and hopes to win this year also. To-day, eleven of the oldest and best players uphold the reputation of the school against eleven players from London; two flag-bearers, flag in hand, mark the bounds, hundreds of youths line the sides, at a distance, and applaud fortunate strokes. The affair is serious; their opponents belong to a celebrated cricketing club, all being admirably skilled, strong, and cool; the youths have a right to be passionately fond of an exercise which grown up men make the principal object of their life.

Indeed, there are gentlemen in this country whose ambition and course of living are those of a Grecian athlete; they subject themselves to a particular diet, abstaining from all excess at table and in drinking; they develop their muscle, and submit themselves to a wise system of training. When prepared, they enter the lists, and compete for the prizes in boating or cricket at all the great competitions in England, even far off in America. I was informed of a cricketing eleven who went to Australia with this design, just as in other days the athletes of Pontus and Marseilles went to Olympus. It is not at all surprising if the youth become enthusiastic for games so much in repute. The head of the eleven cricketers, the captain of the eight oarsmen, is a more important personage in the school than the best scholar.

These already constitute the germs of association, an apprenticeship in commanding and obeying, since each crowd which plays cricket submits to discipline and selects a head. But the principle is still more widely applicable. Youths and young men form together an organized body, a kind of a minor state apart, having its chiefs and its laws. These chiefs are the boys of the Sixth form, more particularly the fifteen monitors, and in each boarding-house the first pupil. They keep order, enforce the rules, and, in general, hold the place of our ushers. They hinder the strong from bullying the weak, are arbitrators in disputes, intervene when a boy has got into a scrape with a villager

or a shop-keeper, punishing the delinquents. In short, here the pupils are governed by pupils, each one, after having submitted to authority, exercises it in turn. During the last year he is enlisted on the side of the regulations; he makes them to prevail; he feels their utility; he adopts them with all his heart, instead of kicking against them, as a French school-boy does not hesitate to do. Hence, when he leaves school, and enters life, he is less disposed to consider rules as absurd and authority ridiculous; he understands freedom and subordination; he has more nearly comprehended the conditions of a society, the rights and the duties of a citizen.

Besides this general preparation, there is a special one. The bigger boys form debating societies amongst themselves, where they discuss moral and political topics. The head-master is only honorary president. After the young speakers have addressed the meeting, the vote is taken, the arguments and the debate are summarized in a report; it is a small parliament. In addition, three of the oldest edit a review, *The Triumvirate.* Their aim "is to arouse in their comrades extended ideas of patriotism, and to interest them in the affairs of the country." They belong to the conservative opposition, argue about the French alliance, about the elections, about the right of voting. There are some common-place things in it, and some gush; but good sense is not absent. For example, with regard to the right of representation, which they wish to extend up to a certain limit only, they appeal to their reader's experience. During the holidays in the country he has seen that the villagers, the shop-keepers of the proposed class, are sufficiently educated to vote rightly. Thus, the argument is practical, drawn from facts, and not from a pompous theory. I have just read a number of this review. Certainly, our students of rhetoric produce by no means anything approaching the same degree of culture and political information.

Add still another trait: All, or nearly all, are religious; they would be shocked at an irreverent word; they sing earnestly in the chapel. Since Arnold's time, the aim of education has been to produce Christian gentlemen; most of them are professedly religious, take the sacrament, and pray nightly of their own accord. Thus, when they enter the world, they are the upholders, and not the adversaries, of the great ecclesiastical establishment of the national religion.

On all hands, I arrive at the same conclusion: There is not in England any great separation between the life of the child and that of the full-grown man; the school and society are on an equal footing, with no intermediate moat or wall; the one leads to and prepares for the other. The adult does not, as among us, leave the compartments of a hot-house, an exceptional regime, a special atmosphere. He is not troubled, taken out of his element, by the change of air. Evidently, to my eyes at least, they are greater children and more manly; greater children, that is to say, more addicted to play and less inclined to pass the limits of their years; more manly, that is to say, more independent, more capable of governing themselves and of acting independently. The French school boy, above all the inmates of our colleges, is wearied, embittered, rendered acute, precocious; he is caged up, and his imagination ferments. In all these respects, and in what relates to the formation of character, English education is superior; it better prepares for the world, and forms healthier minds.

The author of "Tom Brown's School Days" says, "When I formed the project of writing this book, I endeavored to represent to myself the most common type of a little English boy of the upper middle class, such as I had witnessed in my experience, and I faithfully maintained this type from the beginning to the end of my story, while merely striving to give a good specimen of the species." The book thus conceived had an enormous success. Youths and adults all recognize themselves in the picture, and we can make use of it in admitting with the author that the portrait, if not flattered, is at least kindly.

Neither Tom nor his father cared much for education, properly so called. His father asks himself, "Shall I tell him to mind his work, and say he's sent to school to make himself a good scholar? Well, but he isn't sent to school for that—at any rate, not for that mainly. I don't care a straw for Greek particles, or the digamma, no more does his mother. What is he sent to school for? Well, partly because he wanted to go. If he'll only turn out a brave, helpful, truth-telling Englishman, and a gentleman, and a Christian, that's all I want." And when Tom, several years afterwards, asks himself what he came to school for, he replies: "I want to be an A 1. at cricket and football, and all other games, and to make my hands keep my head against any fellow, lout, or gentleman. . . . I want to carry away

just as much Latin and Greek as will take me through Oxford respectably. . . . I want to leave behind me the name of a fellow who never bullied a little boy or turned his back on a big one." Remarkable words, and which well sum up the ordinary sentiments of an English father and child; science and mental culture occupy the last place; character, heart, courage, strength, and bodily skill are in the first rank. Such an education makes moral and physical wrestlers, with all the advantages, but also with all the drawbacks, attached to this direction of mind and body.

Along with other unpleasant effects the rude instincts are developed. An Eton master says that "play comes first and books afterwards." The child places his glory, like Tom Brown, in being a good athlete; he spends three, four, five hours daily in rough and violent exercises. At hare and hounds, a boy flounders for hours in plowed fields and in muddy meadows, he falls in the mud, he loses his shoes, he picks himself up as well as possible. At foot-ball the sides precipitate themselves upon each other; the boy underneath bears the weight of the entire mass, arms and legs are dislocated, collar-bones broken. Nearly all the games habitually yield bruises; pride is taken in not minding them; and by a natural consequence, there is no more hesitation in inflicting than in submitting to them. The child becomes a fighter, a boxer. The author of "Tom Brown" says, "To fight with fists is the natural and English way for English boys to settle their quarrels." All the men I have met did so at school, and this is still common.

Unfortunately the school arrangements operate in the same direction; in addition to impositions, the being kept from play and confinement, the birch is used. In certain schools, it is enough for a boy to appear three times on the "black list," for him to have to prepare for a flogging. This morning four were flogged at Harrow. In all the schools it is the head-master to whom this amiable office appertains. There is hardly a head-master in France who would accept, at such a price, a salary of £6,000. In principle, the flogging is for all, even the larger boys; yet scarcely any but the younger and smaller boys are subjected to it; a strange thing is that it is not unpopular. Fifty years ago at the Charter House the boys, hearing that it was proposed to substitute a fine for it, rebelled, crying, "Down with fines! hurrah for the birch!" and on the morrow they renewed acquaintance with the beloved birch. The teachers with whom I have conversed consider that this chastisement is not humiliating, and that it develops special courage in the child. According to them the strokes are a natural form of repression. It is enough that opinion does not regard them as humiliating, and that the sufferer does not feel himself insulted. Under the head-master, the big boys entrusted with maintaining discipline have the right to inflict the same punishment. For this purpose they carry a cane, in certain schools, and use it.

Here it is necessary to refer to a shocking institution—"fagging," or the obligation of the little boys to be the servants of the bigger ones. The practice has been modified, softened, at Harrow, at Rugby, and in some other establishments; but in itself it always continues bad; for it is a school of brutality, and pushes the English child towards the side to which he inclines, towards all the excesses which the energetic, violent, tyrannical, and hard temperament admits of. A lady whom we know, and who is in truth of foreign extraction, could not bring herself to subject her son to fagging, and has put him in a Paris lyceum.

According to official inquiries, the small boys are valets and slaves. Each big boy has several, who are bound to run errands for him, to sweep his room, to clean his candlesticks, to toast his bread and cheese, to call him at the appointed time, to help him at his games, frequently during two or three hours daily, to run after his balls and return them to him, to be at his orders during all the time he is awake, to endure his caprices.

In order to maintain such an exact and minute obedience, the big boys use terror. "Boxes on the ears, kicks, are mere common pranks of theirs, these not counting among the numerous punishments. . . . . In the first degree the real punishments are systematic boxes on the ears; the offender must keep his hands at his sides and hold his head forward to receive a dozen slaps, applied right and left." On other occasions he places the palm of his hand on the table, the back of his hand is then beaten with the blade of a paper-knife till sometimes a gash is made. Caning comes next, then two kinds of tanning, etc. Tom Brown was tossed in a blanket, and thrown upwards with such force that he struck the ceiling. One day having refused to sell his lottery-tickets to the big boys, he was seized hold

of, held up before the blazing fire, and literally roasted till he was ready to faint. This actually occurred, the romance being but the reproduction of an authentic fact. Besides, in the lives of Cowper, Lord Byron, Sir Robert Peel, other cases equally revolting are to be found.

Doubtless, the instances just cited are the darkest, and, as the English are persevering in matters of reform, the picture is becoming brighter. Yet, even supposing the reform completed, the impression continues unpleasant; for, on the whole, a school conducted in this style is a sort of primitive society, where force reigns almost uncontrolled, all the more so because it is considered a point of honor among the oppressed not to denounce their oppressors. The master interferes as little as possible. He is not, as among us, the perpetual representative of humanity and justice; very seldom and in very few schools is an appeal made to him or to the governing body. The weak are left to themselves; they have but to suffer and be patient. Now, what a temptation is it for a vigorous youth to possess the power and the right to flog! It is not a good thing to give free rein to the instinct of domination and of brutality. The use always leads to the abuse; an incentive to what is unreasonable is given by the irrationality which is practised, to blows by blows which are given; a man ought never to be allowed the opportunity for becoming a despot and an executioner. On the whole, education thus understood is not destitute of resemblance to that of the Lacedemonians; they hardened the body and tempered the character, but, as well as I can conjecture, they often ended by producing hunters and louts.

Naturally, the cultivation of the mind must suffer from such a training. Mr. Farrar writes: "When seeing young men ready to sacrifice everything to cricket, when seeing them devote to it a number of hours and an enthusiasm out of all proportion to that which they give to their work, when seeing that their mind is so continually taken up with it that they speak, think, and dream of nothing but cricket, it is not surprising to find many persons attributing to this affectation of muscularity the miserable poverty of the intellectual results which we obtain."

The teaching is not what is necessary for counterbalancing these gross tastes; there is nothing attractive about it; it can hardly be considered by the young as other than a task; it is very slightly literary and altogether technical. The chief aim is to know Greek and Latin well, to write correctly in verse and prose in these two languages; in fact, by means of memory and exercises, the smartest succeed in doing so. But on other points I consider them inferior. Their Latin, prose and verse, is less elegant and less pure than that of our good compositions written by the classes in rhetoric. They do not seem to know true history; they recount the legends of Curtius and of Regulus as being true. They speak of Chivalry and the Middle Ages in vague generalities, as was done in our old University. They do not appear to feel the differences of manners, of sentiments, of ideas, of characters, which is the result of centuries. They do not seem to have read, like our scholars, the works of a true historian, of a Thierry, of a Michelet, or of a Guizot. In general, they have few ideas; if one excepts questions relating to existing and practical contemporary politics, a student of rhetoric in a Parisian lyceum is more proficient.

They have read many classical texts; but the explanation which is given to them is wholly grammatical and positive. Nothing is done to set forth the beauty of the passage, the delicacies of the style, the pathos of the situation; nor is the process of the writer indicated, the character of his talents, the turn of his mind; all that is left vague. The master does not speak to the pupils as a critic to persons of taste; he does not comment upon the great writers of their country; he does not try to refine their literary taste. It is the same in mathematics; he teaches forms rather than the spirit; the manual of geometry is always the text of Euclid, learned and recited by heart; reason and reasoning have only a secondary place. "Too frequently this teaching tends to form Greek scholars and calculators."

On the contrary, the French youth who is nineteen, possesses, if he is intelligent, and has been industrious, general instruction, a quantity of ideas blocked out, some half-shaped ideas of his own, a decided preference for certain authors and a certain form of style, the embryos of theories, vague views about the beautiful, about history, about philosophy; at least the sentiment that there are vast questions of first importance on which he requires to form an opinion, a requirement all the more pressing because around him skepticism floats in the air, because, most frequently, he has lost his religious beliefs, because no prevailing doctrine,

imposed or accepted, is at hand to arrest his fluctuating mind, and because, if he desires to cast anchor in a port, he is obliged to seek for the port and forge the anchor.

Here many distinguished Englishmen, whom I have known, consider their school, and even their university education, as a simple preparation in mental gymnastics, a training of the attention and of the memory —nothing more. They said to me, "Setting out from that, we have been obliged to undo, or rather to form, our education; to acquire, by personal reading, all that we have succeeded in learning about philosophy, about history, about political economy, about the natural sciences, about art, about literature." A remedy is being found for this defect; the circle is now being enlarged; but it is still narrow, always having Euclid and Sapphic verse as its centre. In consequence, the mind maturing at a later period is left to form for itself its more comprehensive views.

In matters of detail and expense, there is also a marked difference between the two countries. The average outlay for keeping a boy at Harrow is £200 yearly. How many fathers among us would be able to expend £200 yearly on their son's education? In France, a functionary, a man attached to one of the professions called liberal, makes most frequently £120 at thirty years of age, and £200 at fifty, and, commonly, he has, in addition, the interest on a very small capital. But then, as compensation, to keep his son at college costs him only £40, £20 at a minor seminary, and the bursaries given by the State are numerous. It may be calculated, I think, that a classical education costs five times as much in England as in France. The English admit that one of their national vices is the habit of lavish expenditure.

As regards primary instruction, the aid given by Parliament reaches only 8,500 schools; the same grant would maintain 25,000 in France. It would entirely educate 1,500,000 French children, in place of 950,000 English. Mr. Arnold estimates that the expense of maintaining and administering the French schools, in proportion, is one-fourth of that of the English schools. At Oxford, and in the universities in general, B—— tells me that on an average an undergraduate spends £300 a year. However, £200 yearly is sufficient. Some, by means of economy, live on £100. The author of "Tom Brown at Oxford" mentions that a very poor student pulls through on £75, but only because he is lodged gratis, and on condition of being despised. Among us a student of medicine or law, who should have £75, and his lodgings found him, would consider himself well off. Many of them have no more than £60, and the richest never thinks of despising his poor comrade.

SCHOOL DAYS OF GREAT MEN.

EDUCATION, when well understood, aims more to form character than to make scholars. A pedagogical question of the highest importance therefore is how to account for great men. Are certain men born great? Are they made great by circumstances? Is their greatness the result of education? These are questions of vital interest to the teacher who would make the most of the youth committed to his care. Such a teacher will find food for thought in the following narratives concerning the American statesman, Seward, and the German statesman, Bismarck. The first is taken from advanced sheets of a volume soon to be issued by the Appletons; the second is from the pen of Rev. Dr. Bausman, and appears in *The Guardian* for June:

SEWARD.

I remember only one short period when the schoolroom and class emulation were not quite so attractive to me as the hours of recess and recreation. But the devotion was not without its trials. My native village, Florida, then consisted of not more than a dozen dwellings. While the meeting house was close by, the nearest school house was half a mile distant. It stood on a rock over which hung a precipitous wooded cliff. The school house was one story high; built half of stone and half of wood. It had a low, dark attic, which was reached from a ladder. They did say, at the time, that a whole family of witches dwelt in that wooded cliff above the school house by day, and that they came down from that favorite haunt and took up their lodgings by night in the little attic. One day, before I had reached the age at which I was to take a legitimate place in the school, I went there with my elder brothers without parental permission. While there, and all of a sudden, it grew dark, the light of the windows failing. The larger boys and girls were formed in a circle round the open doors to recite their customary lessons. I had no doubt that the tyrannical schoolmaster had kept us in school until night, and I expected every moment to see the aerial inhabitants of the hill enter the school house, and make short work of us all for obstructing them in their way to their nocturnal abode in the garret. Crying vociferously, I was discharged from the school homeward. On the way I met what seemed to me a great crowd, some of whom were looking down into a pail of standing water, while others were gazing into the heavens through fragments of smoked glass. In after years I came to learn that I had thus

been an observer of the total eclipse of the sun which had occurred in the year 1806. The phenomena repeated itself to me 63 long years afterward, under the sixtieth parallel of latitude, in the midst of the Indians of Alaska. * * * * * *

At the age of eight years I was transferred to the Farmers' Hall Academy at Goshen, where my father had been educated. I boarded there with two affectionate cousins, who were nieces to my father, and daughters of the brother-in-law under whom he studied his profession. You have known those ladies well. I need not tell you of the enduring friendship which grew out of that relation. I began then my study of Latin, but my rural training had not prepared me for association with the ambitious youth of the county capital, some of whom insisted that, as I came from a neighboring village, I must establish my right by single combat: and all of whom were disgusted with my refusal to join them in shutting the master out when he required us to attend school on Christmas Day. I cheerfully retired in the spring to private life at home, where a graduate of a New England college had been employed in a new academy, which, in the meantime, had been erected.

My preparation for college was chiefly made here. I was not long in coming to the discovery that the elaborate education appointed for me had its labors and trials. My daily studies began at five o'clock in the morning and closed at nine o'clock at night. The tasks were just the utmost that I could execute, and every day a little more; even the intervals allowed for recreation were utilized. It was my business to drive the cows, morning and evening, to and from distant pastures, to chop and carry in the fuel for the parlor fire, to take the grain to mill and fetch the flour, to bring the lime from the kiln, and to do the errands of the family generally; the time of my elder brothers being too precious to permit them to be withdrawn from the labors in the store and on the farm. How happy were the winter evenings, when a visit of a neighbor brought out the apples, nuts and cider, and I was indulged with a respite from study, and listened to conversation, which generally turned upon politics or religion. * *

The opening of the academy at Florida was attended by one of those efforts for local improvements which too often prove merely convulsive, as this one did, but can seldom be injurious. Too much is expected of them, and the failure to realize all brings reaction, followed by ridicule, the most effective weapon of conservatism. The ascent to an academy from a school which was of the lowest class, never attaining half the stability or character which belongs to the common school under our present district system, was abrupt, and therefore impossible. Nevertheless, teacher, parents and pupils were of one consent in trying it. Very ludicrous incidents occurred. The plan embraced four distinct measures, all of which seemed to the pupils of my age, and perhaps even to our rural parents, new inventions.

First, we were to learn to "declaim select pieces." Second, we were to "write original compositions." Third, we were to have a "debating society." Fourth, an annual and semi-annual "dramatic exhibition." Charles Jackson, a farmer's son, I think 14 years old, but large enough for 18, dull and awkward, was called upon to open the exercises in declamation, with the speech of Romulus on the foundation of Rome. At the first attempt, taking his place in the middle of the school room, with arms hanging straight downward, and eyes dropped to the floor, he spoke the speech in a low and perfectly monotonous manner, and was dismissed with the master's criticism that he had done very well for the first effort, but on the next Thursday he must speak with head erect, and turn from one side of the audience toward the other. With continued prompting he managed to lift his eyes and roll his head from right to left, with regular alternation, through the whole exercise. This proved, to the awkward boy, a sad encouragement, when it brought the further requisition that, on the third rehearsal, he should gesticulate with his arms and change the posture of his feet. He honestly declared that he could not understand the process, nor the object of the required movements of his arms and legs.

Thereupon the master opened a page of the *Monitor*, and showing him a diagram in which the orator was represented standing with head erect, facing a dotted line drawn across the opposite wall, a similar dotted line drawn across under his feet, one arm horizontally extended from the shoulder, with a dotted line extending from the end of the thumb to the wall, and the other end raised at an angle of 45°. with a dotted line from the thumb of that hand stretching also diagonally to the wall. The diagram only confused the pupil still more. The master cleared up the affair by taking a stand and going through the motions indicated by the diagram, shifting his feet first to one side and then to the other, lifting one arm and then the other, and thus showing how easily it could be done.

Thereupon Charles, thus instructed, took the master's place, and aiming as well as he could at the points designated on the wall, and turning his head to the right, lifted his right arm out, straight and stiff; then, suddenly dropping that arm and turning his head to the left, he lifted the other to the same position, and so, with the regularity, precision, and quickness of a clock pendulum, sawed the air, and meanwhile, with a drawling intonation, addressed the people of the newly-established city of Rome in a manner that Livy never dreamed of:

"If all the strength of *cities*, (sawing with right arm,)
Lay in the height of their *ramparts*, (sawing with left arm,)
Or the depth of their *ditches*, (sawing with right arm),
We should have great reason to be in *fear* (sawing with left arm)
For that which we have now *built*" (sawing with right arm).

Charles Jackson, I think, was discouraged. He certainly never became even a stump orator or a Methodist exhorter.

It was mine to lead off in the second great enterprise—that of "original composition." Not having the least idea of what was wanted, or how it was to be done, I moved to the side of Robert Armstrong, a young man 18 years old, self-possessed and capable of instructing me, because he had already been a pupil at the famous Academy of Mendham, New Jersey. He told me nothing was easier. "You are," said he, "first to take a subject, and then all you have to do is to write about it." "But," said I, "what is a subject?" He replied, "It is anything you want to write about. "But," said I, "I don't know anything that I want to write about. I wish I could see a composition." "Well," said he, "if you won't tell, I will show you an old one of mine that I wrote at Mendham." Having bound myself to secrecy, he showed me a composition, which was after this sort: "On Drunkenness." (A heavy black line was drawn under this caption). "Drunkenness is the worst of all vices."

Then followed an argument which, I think, well sustained the proposition thus confidently announced. I do not know why, perhaps because I was constitutionally an optimist, I decided instantly that I would not choose for my subject anything that was naughty, bad, or wicked. So I said, "I will choose a different subject, and will show the composition to you when it is written." He promised me his help. I wrote with great labor my essay, brought it, and submitted it to him. It began: "On Virtue. Virtue is the best of all vices!" My success in my department seemed as hopeless as Charles Jackson's in his.

BISMARCK.

Pomevern, from *Po Move*, Sclavic words, means "beside the sea." Its English equivalent, Pomerania, expresses the same meaning. The Baltic Sea bounds it on the north, hence its name. In this north German land has been the home of the Bismarcks for six hundred years—since the twelfth century. Warriors and statesmen, men of blood and men of piety, grace the annals of the family. Some noble in name, but ignoble in conduct and life. Not a few men and women rich in pious and heroic deeds.

These long family lineages constitute a most perplexing kind of historic reading; entanglements of names, dates, minute tracings of the ramifications of kinship, to their remotest findings. Withal there is something very honorable in a long and worthy family lineage. Its numerous stories of, noble deeds weave wreaths of glory around the homes and hearths of centuries, and incite the descendants to adorn the memory of the fathers with a brave and truth-loving life. To such an inheritance Otto Von Bismarck fell heir. He was born April 1, 1815. He had three brothers and two sisters. As is often the case, the talents of the whole family centered in one child, in Otto. Save a brother and sister, all died young. His parents usually passed the winter months in Berlin. Already in 1821, Otto was put to school here, along with his only surviving elder brother. Here, under various private tutors and professors, he laid the foundation of his great learning, and of his ready and perfect use of the English and French languages, besides that of his own tongue. His father was a man of influence, who filled important offices of state. "Handsome, personable and cheerful, full of humor and wit," with moderate intellectual powers, but fine qualities of heart. His mother was a lady of fine education, esteemed for her beauty and social qualities; "wise, ambitious, and somewhat haughty." She early sought to awaken ambition in her two sons. Before the mind of Otto, she held up the attractions of a diplomatic career. For this she thought he was specially fitted; and this in the end he selected. She was inclined to live in a style beyond the means of her husband. She was fond of fashionable Berlin life; her husband loved the country, especially his Pomeranian home. Although often weary of Berlin, he yielded to her wishes. To the end of his life he was fond of hunting, as is his son Otto; never so happy as when returning from an exciting chase with a stag or a brace of hares. She was passionately fond of playing chess of which she was a complete mistress.

How the old gentleman indulged in these sports Otto describes in a letter to his sister in 1844. "We go out in the pouring rain, or at six degrees of frost, accompanied by Ihle, Bellin and Charles, surround an old bush in a sportsmanlike way, silent as the grave, as the wind blows through the cover, where we are all fully convinced—even perhaps my father—that the only game consists of women gathering faggots, and not another living thing. Then Ihle, Charles and a couple of hounds, making the strangest and most prodigious noise, particularly Ihle, burst into the thicket, my father standing perfectly stock still, with his rifle just as if he fully expected some beast, until Ihle comes out shouting, "hu! la! la! fuss! hey! hey!" in the queerest shrieks. Then my father asks me, in the coolest manner, if I have not seen something; and I reply with a most natural air of astonishment, nothing in the world! Then growling at the rain, we start for another bush where Ihle is sure we shall find, and play the farce over again. This goes on for three or four hours, without my father, Ihle and Fingal exhibiting the least symptoms of being tired."

On his sixteenth birthday, Otto Von Bismarck was confirmed by the celebrated Schleiermacher, in the Trinity Church of Berlin. It was on Easter day. To him ever after a memorable day.

Bismarck, from an early age; was much from home, at school and elsewhere. He says that this was anything but advantageous to him. "Perhaps his mother was afraid he might get too early spoilt; for with his gay nature and constant friendship, the little boy early won all hearts. He was especially spoilt by his father and by Lotte Schmeling, his mother's maid and his own nurse."

The treatment he received at some of the boarding schools was very severe. At one such in Berlin, poor diet, exposure, and all manner of severities were inflicted upon the boys, in the name of Christian training, to harden them for future earnest work. Sometimes when out walking he had to weep when he saw a plow at work, because it reminded him of his free and happy Pomeranian home. By this rough and tough usage his masters aimed to train tough and true men. What a heaven of boyish bliss his vacation brought him! He would hasten home, and visit the neighbors of his parents. One of these, the Blackenburgs, has become famous in his memory on account of a certain kind of cheese-cake which the boy relished very much.

In the Fredrick William Gymnasium of Berlin, he studied with more comfort. Its Director or Principal then was a Dr. Bonnell. He says; "My attentention was drawn to Bismarck on the very day of his entry, on which occasion the new boys sat in the school-room, on rows of benches, in order that the master could overlook the new comers with attention, during the inauguration. Otto Von Bismarck sat, as I still distinctly remember, and often have related—with visible eagerness, a clear and pleasant boyish face and bright eyes, in a gay and lightsome mood, among his comrades, so it that caused me to think, "That's a nice boy; I'll keep my eye upon him." He became an inmate of my house, at Easter, 1831, where he behaved himself in my modest household, then numbering only my wife and my infant son, in a friendly and confiding manner. In every respect he was most charming. He seldom quitted us of an evening. If I was sometimes absent, he conversed in a friendly and innocent manner with my wife, and evinced a strong inclination for domestic life. He won our hearts, and we met his advances with affection and care—so that his father, when he quitted us, declared that his son had never been so happy as when with us.

Ever thereafter Bismarck held his kind teacher in grateful remembrance. For the earlier cultivation and discipline of the mind he owes much to Dr. Bon-

nell, and that he knows full well. After he became Prime Minister of the German Empire, he would often go out of his way to pass No. 18, in the street called Konigsgraben, in Berlin, the home of his old friend, Dr. Bonnell, and that of his own boyhood. With touching interest he even now yet occasionally strolls along that way, and looks up at the small window of the room he occupied as a student. The window has been walled up, but his heart still finds the spot.

Well may the venerable teacher feel a little proud of his pupil. And very touching and beautiful is the ardor with which Bismarck greets and honors his early friend. After the victory of Sadowa, in July, 1866, when all Europe rang with the praises of the great Minister of Prussia, he entered Berlin with the then King William. The enthusiasm of the people knew no bounds. When the storm of applause had somewhat abated, a white-haired old gentleman stepped out of the vast, tumultuous crowd—it was the Director, Dr. Bonnell. Bismarck seized his early teacher by both hands, and thanked him heartily for a poetic greeting with which he had presented him on his return, merrily regretting that he had not been able to reply in Alsaic verse. The Chief Burgomaster of Berlin, sitting opposite, asked whether the Minister President sent his sons to the same institution. "Certainly," answered Bismarck; "and I myself was also a scholar of Bonnell." And so he introduced his teacher in the heartiest manner.

It is said that in his early school days, his teachers seldom had occasion to reprove or punish him. Studying seemed to be a comparatively easy task for him. In 1831, the cholera broke out in Berlin. His father, alarmed for the safety of the boy, ordered him to return home as soon as the first case was heard of. As he longed to go home, he was eager to hear of a case. Perhaps the papers did not announce the unfavorable news promptly. Boylike, he must go in search of a cholera case. He hired a horse and rode several times to "Frederick's Field," in which district the disease was expected to appear first. On one of these rides his horse fell and sprained the boy's leg. Great was the alarm of Master Bonnell, when the injured student was brought to his house. Instead of going home, he was confined to his dreary sick bed for awhile, yet he bore his troubles with a cheerful heart.

A French writer says: "The education of the German Universities begins where that of most nations in Europe ends." In Germany the Gymnasium, in thoroughness of intellectual discipline and training, is equal to the most, and superior to some of our American Colleges. There it is an institution preparatory to the University. To which of the renowned Universities of Germany should he go? Heidelberg was his preference. But then already, as now, Heidelberg was famous for beer-drinking and duels. The mother protested against his choice. She could not entrust the education of her son, then not yet seventeen years of age, to such a nursery of infidelity and rowdyism. At the advice of a friend she proposed the University of Gottingen. He cheerfully consented. He longed for the unrestrained liberty of student life at the University. To him it was a perilous change. Entirely free from parental and academic restraint, he threw aside books for awhile, and was carried along with the convivial current of fast young men. In a whole session he attended only a few lectures. Of course he must fight duels; indeed, fought one with a Jewish lad before he left Berlin. The Jew gave him a cut in the leg, while he cut off the Jew's spectacles. At Gottingen he fought oftener. Four Hanoverians laughed at his dress. He called one of them "ein dummer junger" (foolish fellow). The result is a challenge from the four Hanoverians. During one term he was engaged in some twenty duels. In one he received a cut in his face, whose scar he bears to this day.

This wild life left him little time and inclination to study. Still, by dint of occasional fits of extraordinary industry, he stood pretty good examinations. It was during these days of wild revelry that he received the name of "Mad Bismarck," which all his glory has not been able to shake off. One of his more orderly student associates was our own Lothrop Motley, the celebrated historian of the Netherlands. Then already, as since, he was very determinate in the overcoming of obstacles. A boot-maker repeatedly belied him as to the furnishing of his boots. At six o'clock one morning his servant roused the untruthful mechanic with the question! "Are Herr von Bismarck's boots ready yet?" The sleepy maker said "No." Ten minutes later there was another loud ring at the shoemaker's bell. "Are Herr von Bismarck's boots ready yet?" "No." And so it went on every ten minutes until the lying shoomaker could endure it no longer. The boots were soon thereafter ready.

When a boy and youth Bismarck grew tall, "slim and thin." His pale face gave him a delicate appearance. Yet his health, as a rule, was good. He has always been a hearty eater. Only after he had reached mature life, did his stature develop into its present grand and kingly form. This is partly owing to training. He has from a youth studiously avoided a stooping or careless posture. His sons he trained in the same way. At table, in society, and at their tasks he ordered them always to sit, stand or walk straight, like a soldier on drill.

He has from a boy been passionately fond of horseback riding. And we venture the assertion that even at his advanced age, there are few men in the German Empire who can ride a horse more gracefully than Bismarck. His horse Caleb, a dark chesnut, more fleet-footed than handsome, was his favorite charger. He carried his master at a speed which people could scarcely believe. He took his gay roan mare with him on long journeys, and sadly lamented her absence when deprived of her services. It must have been a grand sight to see her careering through the Thiergarten at Berlin, or dashing after deer in his Pomeranian parks, proud of her lordly rider. Riding and hunting were his favorite pastimes. "Even from a child he has been fond of dumb animals, and has spent much money in fine horses and dogs. Often could we see a favorite dog sitting on a chair by the table, his master at his hard work. To this day the most comfortable royal coach has no charms for him such as the saddle. And as he rises in his place in the German Reichstag, his noble form and grand physique towering above all his colleagues, many of his early friends are reminded of his bold and daring rides o'er heath and moor, through rain and storm, breasting the elements and breathing with his full and strong lungs the pure air of heaven."

Some ambitious young men imagine that all that is necessary to become great is to imitate the vices of certain great men. Some youths affect to write Byronic poetry by indulging in their cups and acting the misanthrope. It is a wonder that they do not by some means try to get a club foot like his. Brainless wights may imitate Bismarck in some of his early excesses, with the hope that such an experience will

develop genius. They were serious drawbacks; he has overcome them, and in spite of them became great. I give the good and bad qualities of his earlier character—the good as an incentive to virtue, the evil as a warning against sin. A life of pleasure does not always bring happiness. After the close of his university career, he undertook to manage his father's estate in Pomerania. Kniephof it was called. Embarrassed and unproductive by mismanagement, he soon improved matters. Therein already he showed certain mental powers, on a small theatre, which since then have made him the controlling spirit of a great empire. While lord of the Kniephof, managing an army of farm laborers, he was still in some respects a fast young man. He made all his journeys on horseback; sometimes rode from eighteen to thirty miles to evening parties. Yet he felt sad and lonely when by himself. Often he was harassed with disgust of life, and a painful sense of its vanity. Albeit his habits continued the same. Older and more staid people shook their heads at his excesses. He will surely be ruined in character and purse, they predicted. Kniephof became the resort of convivial comrades, and resounded with their wild orgies. Some called it Kneiphof instead of Kniephof. Kneipe means a pot-house or drinking resort. *Pot-house home* was the meaning of the pun. Here these young men discussed politics, the host leading in the discussions. "He made an impression on all of us," one of his associates said afterwards. Meanwhile he inwardly battled against his wild inclinations. He ordered books on various subjects—works of history, philosophy and theology. These he studied with great care. Thus matters went on for awhile. At length Kniephof of a sudden became mysteriously quiet and orderly. What could it mean? "Bismarck is going to India," said some. "He is falling in love," said others.

A few years later he met a certain young lady at the house of a noble friend. Possessing charms of natural beauty and intelligence, he at once felt an affection for her. Whether she loved him in turn was for a while questionable. And when he had won her heart, it was difficult to gain the consent of her father. The lover of his daughter was chiefly known to him as "Mad Bismarck." It is said that when her father, Herr Von Puttkammer, received Bismarck's letter, asking for the hand of his daughter, his family was thrown into consternation. He was reported to be a pious man. No oath was heard among his many laborers. And when they brought home their large loads of grain in harvest time, he would greet them with the devout words: "Let us all give thanks to God." The good father never dreamed that his daughter, so piously trained, could love such a reputed rowdy. She was so gentle and mild; he just the opposite. Those who are of kindred souls rarely wed together. When the poor girl frankly acknowledged her affection, he felt "as if he had been felled with an axe." Her mother protested against such an unwise choice. One day Bismarck clasped his bride to his heart in the old lady's presence. The scene melted her to tears. She gave her cordial consent, and ever thereafter was one of her distinguished son-in-law's warmest friends. The name of Bismarck's affianced was *Johanna Fredericka Charlotte Dorothea Elenore Von Puttkammer!* Much more euphonious was her subsequent name, Countess Von Bismarck.

From this time he became a man of steady habits. At the old, stone mansion of Schonhausen, the Bismarck homestead, he and his bride began housekeeping. Where his cradle once stood, amidst the associations of his boyhood, began that genial home-life, which has ever since been the shrine of his heart, the centre of his tenderest and most sacred affections. Amidst the severe battles of a time so rife in immeasurable contradictions, Bismarck commenced his family life in a simple but substantial manner, as befitting a nobleman of the Alt Mark or Pomerania. And in his general habits he became a very different man. His wife evidently exerted a blessed influence on him. The strongest minds are the most readily impressed by woman's benign influence. "Of old it has been known that valor and tenderness form the noblest and most beautiful union." The hard-hearted are often guarded by maiden gentleness. All the true and brave are more or less tender.

In 1851, Bismarck says in a letter to his wife, of a visit to a resort where he had indulged in the excesses of his student life: "I went the day before yesterday to Wiesbaden, and with a mixture of sadness and wisdom, we went to see the scene of former folly. Would it might please God to fill this vessel with His clear and strong wine, in which the champagne of twenty-one years of youth foamed uselessly, and left nothing but loathing behind. How many are buried with whom I then drank, flirted, and diced. How many transformations have taken place in my views of the world, in these fourteen years, among which I have ever looked upon the actually present as the true! How little are some things to me that then appeared great! How much foliage may bud, grow green, give a shadow, rustle, and worthlessly fade within the next fourteen years, till 1865, if we live to see it? I cannot understand how a man who considers his own nature, and yet knows nothing of God, and will know nothing, can endure his existence from contempt and wearisomeness. I know not how I could formerly support it: were I to live as then, without God, without you, without my children! I should not indeed know whether I had not better abandon life like an outgrown garment; and yet most of my acquaintances are in that state, and live on. If I ask of an individual, what object he has in living on, in laboring and growing angry, in intriguing and spying, I obtain no answer. Do not conclude from this tirade that my mood is dark; on the contrary, I feel like a person who looks, on a fine September morning, on the yellow foliage; I am healthy and cheerful, but I feel some melancholy, some longing for home, a desire for forests, oceans, wilderness, for you and my children, mingled with the impressions of sunset and of Beethoven."

Bismarck has good reason to turn with increasing tenderness to the partner of his eventful life. A highly intelligent and refined lady, she is said to be plain and simple in her style, and frugal and industrious in her habits. In his frequent and long absences from home, Bismarck's wife manages the affairs of his private estate, as few of her sex would be able or disposed to do. Although now past sixty years of age, she is still fresh and vigorous in body, and comely to look upon. She superintends her farm work, goes about the house with a great bunch of keys at her girdle, in the good old style. Her bedrooms are filled with knitted quilts and other serviceable productions of her own industry and skill. Among the nobility of Germany such housewives are often found. Their great model, to whom they look for good example, is the Empress of Germany, the venerable wife of William I. Except on special public

occasions, she is one of the most simply dressed women in the society gathered around her. Her storebills are said to be less than those of many of the housewives of the Berlin merchants. Not unfrequently she is seen driving out in a calico dress. These simple, unaffected, useful habits of German housewives among the nobility, are a commendable. and pleasing feature of their social life.

TEACHING A LITTLE CHILD.

MISS E. M. COE.

THE education of even a little child is of importance. It will require time to convince the public of this, as it is supposed that nothing can be done for it until it reaches the age of eight years. The question then is, What is to be taught, and how it is to be done? By considering the subject we see that a child is to be trained up to happiness, not only here but hereafter. It is beginning to be understood that something more can be done year by year to add to the sum of human happiness. The teacher will naturally ask, How can a little child be rightly educated? Now a child is in my school but four hours per day, and all the rest of the time at home. We can do much here, but who is at work the rest of the time? The home instruction of most little children is not only very deficient but given in a wrong way. Hence they come with bad habits to start with. So that a part of our duty is to remove these and teach right ones. Among the first things to be thought of is our attitude towards little children upon their entrance. We must cause them to feel that school is a pleasant place, that teachers are their friends. We must encourage them to have confidence in us. We must try to understand them. To do this, encourage them to talk. We begin with children three years of age, you know, and their minds are wholly uncultivated and have very little development. Still they have ideas; they can be educated.

The great objective point will be of course the perceptive faculties. There is much said about the cultivation of the perceptive faculties, and we must have clear ideas about what we mean by the terms we use. To cultivate the perceptive faculties is to teach the child *to think about the things he sees.*

The work at home has not been directed towards this end. The books given have not been properly selected. We must take the child and see that he is cultivated on all sides. Now a child is full of activity, and his active powers must receive attention. Hence we must be sure and give him *occupation.* The word as we use it means a great deal. We let our children receive instruction for twenty minutes and then take ten minutes for exercise, for singing, marching, and suitable plays. I have devised a set of suitable exercises that especially employ the upper part of the body, the arms, the hands, the lungs, the fingers; because the lower part of the body is pretty well exercised by the walking and running the child does.

Three things must be borne in mind continually: Fresh Air, Exercise, and Occupation. Fresh air in education is of the highest importance. At the end of each twenty minutes the children gather at the piano, and the windows in the part where they have been sitting are thrown open, and thus they get fresh air to breathe. While this is being done we sing and exercise. I am of the opinion that genuine exercise is better than a constant use of the plays; of these they soon tire; of the exercise with music and songs they never weary. Besides the songs are a positive advantage to them, in giving them new thoughts.

Now, as to the Occupations themselves. We call them thus rather than lessons, though such they really are. Every day something is done to enlarge their knowledge of the Animal, Vegetable and Mineral Kingdoms. This must be done properly yet systematically, so that in the course of months a little child will know not only a good deal about each, but will be observing a good deal also on his own account. We ask them to bring something daily that God has made, and so we have coal, leaves, feathers, butterflies and fruits. We thus attempt to draw the attention of the children to the wonderful world in which we live, and to have them acquainted with it. As to the kindergarten occupations, I shall speak of them in detail in future lectures, as you know I shall meet you three times each week. The use of these Occupations, or gifts, as they are sometimes called, requires the highest skill. They must not be used when something more stimulating and powerful is needed.

It will be seen that this preparation awakens a child's desire to know. Hence, by a suitable course of lessons, longer or shorter, as the case may be, varying with each child, the little one will be fitted in time to undertake the task of learning to read. Among the various occupations one of the most interesting, is that of color, I

mean the learning of the names of colors, the comparison and grading of them. It is a great error to use more than one color at a time. I take, first, a blue ball, and then we attempt to weave this color into our acquired knowledge, the blue sky, etc.

The great object we propose is by the most natural means to interest and develop the child's mind. The study of these means requires a life-time; the teacher by knowing them becomes skillful in her work and possessed of exhaustless resources.

N. Y. School Journal.

HUXLEY ON EDUCATION.

THE one superlative advantage derived from the earnest study of science is the habitual, nay, almost instinctive desire for truth which it invariably creates in every sincere student. This desire for truth, in its turn, breeds the faculty of discerning truth, and ultimately develops into that clear, logical condition of mind which seems to shed light on every thing that it approaches. The great public cannot ever become acquainted with the chief labors of a great scientist, except by hearsay; but it can readily recognize his eminence by the clear discernment of truth, the lucid statement of facts and arguments, with which he approaches the most common-place subject that comes within the reach of every one's knowledge. To truly estimate Professor Huxley's labors as a paleontologist or osteologist, requires a knowledge of these subjects almost equal to his own. But no person can read even the simplest of the lay sermons or addresses in his last volume without being impressed by the fact that he is in the presence of a master mind, of a mind that, whatever its chosen field of labor, must always recognize truth with unerring certainty, seize it with irresistible force, and shape it with artistic skill into a form so complete, so perfect, that it carries the same power of conviction as the evidence of the senses.

Of the fifteen different articles, scattered originally through as many different publications, but now gathered into the one volume before us, ten are more or less purely scientific in their subjects, though all appeal to cultivated lay readers, while five are devoted to a subject that has an absolutely universal interest; and it is well for the reader that, in the order of arrangement, precedence has been given to the latter. For the charm of the author's manner is such, that even thoughtless readers, attracted by the general interest in the earlier essays, will be insensibly led on to follow him into "the physical basis of life," or "the scientific aspects of positivism," from which they might have shrunk, if encountered at the very threshold.

The subject of most general interest, discussed by Professor Huxley, is one which at this moment is causing considerable discussion among ourselves, "education;" and one of his principal objects is to point out the deficiencies of our present system of teaching, not so much in its methods, (for these he refers to only incidentally), as in the matter taught. What he says of English schools applies almost with equal force to our own. "Consider," he says, "our primary schools, and what is taught in them. A child learns to read, write, and cipher, more or less well; but in a very large proportion of cases not so well as to take pleasure in reading, or to be able to write the commonest letter properly." We are so much in the habit of placing implicit faith in the asserted superiority of our American common schools, that we are apt to think that *this* remark could scarcely apply to them, whatever others might. Yet in the Annual Report of General Schriver, Inspector of the United States Military Academy at West Point, just published, we find the following paragraph, which, from its source and from the evident fairness of its writer, is certainly entitled to be quoted as authority. "The results of the late examination," says the general, "have, with greater force than ever before, directed the attention of the academic authorities to the utterly superficial system of education seemingly prevalent throughout the country. It is no longer unusual or surprising to find candidates rejected at West Point for deficiency in the primary branches of a common school education. . . . Though the requirements for admission are certainly not beyond the capacity of an ordinary pupil of the common schools, it is doubtful whether one tithe of the vacancies at the academy could be filled without the one year's preparation for examination provided for by law." This statement may seem extraordinary, but it is borne out by the experience of every merchant, banker, or lawyer, whose business brings him in contact with the class of boys graduating, year after year, from our common schools and academies, and it furnishes a startling illustration of the misdirection of the efforts,

and of the frightful waste of time devoted for eight or nine years in succession to attendance in our common schools.

The reproach of devoting too much time to classical studies is perhaps less deserved by our schools than by the English. Nor would it be just to Professor Huxley to represent him as depreciating the earnest and enlightened pursuit of classical learning. He protests emphatically against the inference. "I have not," he says, "the least desire to speak ill of such occupations, nor any sympathy with those who run them down. On the contrary, if my opportunities had lain in that direction, there is no investigation into which I could have thrown myself with greater delight than that of antiquity." What he does object to, and rightly objects to, is, that to these and similar studies the best years of our lives should be devoted, *to the exclusion* of all those studies which would benefit us in our practical career; that practically a child is told on first entering school, "There you shall toil, or be supposed to toil; but there you shall not learn one single thing of all those you will most want to know the moment you leave school and enter upon the practical business of life. You will in all probability go into business, but you shall not know where, or how, any article of commerce is produced, or the difference between an export or an import, or the meaning of the word 'capital.' Very probably you may become a manufacturer; but you shall not be provided with the means of understanding the working of one of your own steam-engines, or the nature of the raw products you employ. . . . . You will have to take your share in making laws which may prove a blessing or a curse to millions of men. But you shall not hear one word respecting the political organization of your country; the meaning of the controversy between Free-traders and Protectionists shall never have been mentioned to you; you shall not so much as know that there are such things as economic laws."

We desire in this connection to direct the attention of our readers to the volume itself, which contains a large amount of solid, substantial truth, in clear, plain, and admirable English, and to point out especially that one of the foremost Englishmen of our time, a man to whose influence with his own countrymen the influence of scarcely any American of our day is to be compared, is persistently devoting his talents to the dissemination of the great truth, that a knowledge of the laws of the physical world, of the relations of cause and effect, will do more to remove the evils under which society labors than all other knowledge combined, and that, therefore, these laws should be made the subject of more general study, and should be made the principal object of every class of education.

If ever a people has suffered from ignorance of the natural laws which regulate man's well-being upon earth, it is surely the people of the United States to-day. Are we too proud to profit by the warning words of one of America's best friends, of one of England's noblest, bravest, truest sons?—*Ex.*

STUDY OF ENGLISH LITERATURE.

NO. VII.

WE have now glanced at a few of the leading poets, and will devote a moment to the consideration of two or three of the best prose writers of England. Among these the most worthy of study, perhaps, is Thomas Carlyle. This man has probably given a greater stimulus to thought than any other writer of the present century. Possessed of great force and originality, he fell, as we think quite naturally, into a style which many critics have pronounced affected, and which has been designated by the British reviewers as *Carlylese.* We know many people of intelligence who complain that they cannot understand him. Their failure, we think, proceeds from a wa t of imagination, from a lack of capacity to enter into other moods than those habitual with themselves, from an unsympathetic character. To a reader bringing to the study a mind at once sympathetic and versatile, Carlyle presents no unsurmountable difficulties. His humor is well-nigh unrivaled, though many would pronounce it grim, some, more ill-natured than they, saturnine. His "Sartor Resartus" is one of the most original and delightful of books to him who can understand it, and his "French Revolution" is nothing less than fascinating, though it is true that to read it one must be pretty well versed in the period of French history of which it treats before he begins the work.

If any reader of these papers should desire to make the acquaintance of this truly wonderful genius we would recommend him to begin with the "Latter-Day Pamphlets;" but we warn him, at the outset, that he had better save himself the trouble and expense

of purchase unless he can lay aside all passion and divest himself of all heat, otherwise what commonly passes among us for patriotism, will be excited to a violent pitch of antagonism, since Carlyle no more spares our prejudices than he does those of his compatriots. The following short extract must serve as a sample of his mode of treating a subject. It is part of his reply to an American correspondent, Jefferson Brick. Carlyle is contrasting Bobus Houndsditch, the rich sausage-maker, with the "Bishop of our Diocese." After frankly admitting the Bishop's weak points, he proceeds:

"The Bishop I, for my part, do much prefer to Bobus. The Bishop has human sense, and breeding of various kinds; considerable knowledge of Greek, if you should ever want the like of that; knowledge of many things; and speaks the English language in a grammatical manner. He is bred to courtesy, to dignified composure, as to a second nature; a gentleman, every fibre of him, which, of itself, is something very considerable. * * Bobus, for twice the annual money,—brings sausages, possibly of horseflesh, cheaper to market than another! Brick, if you will reflect, it is not 'aristocratic England,' it is the united posterity of Adam who are grown in some essential respects stupider than barbers' blocks. Barbers' blocks would at least say nothing, and *not* elevate, by their universal suffrages, an unfortunate Bobus to that bad height,"—that is, an income of ten thousand pounds a year.

The "Essays" are delightful. That on Burns must please nearly all readers of intelligence.

A word in reference to Thackeray and Dickens. Dickens has a hundred readers among us where Thackeray has one. But nevertheless Thackeray is the greater man. His "Vanity Fair" is the greatest novel that ever was written. We do not intend to depreciate Dickens—he has done a vast deal of good, and scarcely any evil, but he has never produced a single truly noble character. This Thackeray has done, and the charge, so often brought against him, that he is ill-natured and misanthropic is utterly without foundation. But he dissects remorselessly, hence his unpopularity among such people.

Of Charlotte Bronté and George Eliot we will only say that the former is more dramatic than the latter, who has, however, the greater breadth. A beginner should first read Charlotte Bronté's "Jane Eyre," and of George Eliot, the "Mill on the Floss;" her most artistic and beautiful work.

EXAMINATION QUESTIONS.

THE OHIO STATE BOARD OF EXAMINERS.

THE following extended list of Examination Questions we take from the last volume of the *Ohio Educational Monthly*. The full set of papers is given, omitting only the questions in Analytical Geometry and Calculus, Latin, and Greek. Teachers in Pennsylvania, who are alive, will be much interested in comparing these questions with those proposed to themselves in their local and special examinations. Prof. W. D. Henkle, editor of *The Monthly*, says of this list:

"Many teachers have a great desire to know the requirements of the State Board of Examiners. The object of the law in reference to State Certificates was not to relieve teachers from the dread of local examinations, but rather to furnish a means of awarding diplomas to teachers of eminent qualifications for the work of education. When we were working on the codified school bill, several years ago, we attempted to secure a provision for ten-year certificates good all over the State, which certificates would be intermediate between the State Life Certificates and County Certificates. Such certificates could reasonably be sought for by many deserving teachers not yet known to fame. To give an idea of what the present State Board of Examiners are doing, we give a list of questions used by them at the recent examination in Cincinnati. We hardly know whether or not to apologize for taking up so much space in their publication when we consider that, so far as we now remember, no samples of our State Examination questions have ever been published in this journal, and that we have received so many calls from teachers for the publication of these questions."

READING.—Indicate the correct pronunciation of the following words: Acclimate, hymeneal, coadjutor, Cayenne, conversant, finale, gape, obesity, raillery, gum-arabic, allopathy, bouquet, camelopard, comparable, docile, finance, isolate, orthoëpy, sperm-aceti, vagary.

Difference between Pitch and Emphasis? What sentiments should the monotone be used to express? Selections to be read from Poe's "Raven;" from "The Boys," by Holmes; from Clay's Speech on the Compromise Resolution.

ARITHMETIC.—Separate 120 and 144 into their prime factors, and show what factors compose the L. C. M., and the G. C. D. of the two numbers. Upon what principle does cancellation depend? What is the difference between true and bank discount? A merchant sold goods at 25 per cent. above cost for

$1259.62½ on credit of 90 days, taking in payment a note which he had discounted at bank on the same day at 10 per cent.; what was his net gain? *Analyze:* A can cut a cord of wood in ¾ of a day, B in ⅔ of a day, C can cut as much as both A and B; how long would it take the three together to cut 2½ cords? What per cent. of the square root of 39.69 is the cube root of 373.248? What must be the asking price of cloth costing $3.29 per yard, that I may deduct 12½ per cent., and still gain 12½ per cent. on the cost?

GEOMETRY.—What is a straight line? Draw such a line through a given point to touch a given circle, the point being exterior to the circle. What is a circle? Inscribe a circle in a given triangle. Divide a given straight line into three parts proportional to three given straight lines. Construct a mean proportional between two given straight lines. Prove that if the diagonals of a quadrilateral mutually bisect each other, the figure is a parallelogram. Prove that the common chord of two intersecting circles bisects the common tangent.

TRIGONOMETRY AND SURVEYING.—Define Sine, Co-sine, Tangent, Co-tangent, Secant, Co-secant, Versed-sine. Trace the changes of sign in the Sine, Co-sine, Tangent, and Co-tangent as the angle varies from zero to 360°. Prove that the sides of a plane triangle are proportional to the sines of the opposite angles. Determine the height of a tower situated on an inaccessible hill. Explain the method of platting a survey from the field notes.

GRAMMAR.—Analyze the following sentence, and parse the italicized words:

So at the post
"*Where* he hath set me *in* his providence
"I choose *for* one to meet him *face to face*,—
"No faithless *servant* frightened from my task,
"*But ready* when the Lord of the harvest calls."

Give the rules for the formation of the plural number, and pluralize the following nouns: genus, genius, canto, chromo, nebula, amanuensis, 9, and Mr. Brown; also, give the declension of the last. Define Mode and Tense, and parse the italicized verbs that follow: "*Would* that I *were* a weaver." "'*Twere* wise in man to give it then a tongue." Illustrate fully the proper use of *may, can, shall, will, should* and *would*. Give synopsis of the verb *smite*, indicative and subjunctive modes, active and passive voices, first person, singular number. Define Defective, Redundant and Impersonal verbs, and give examples. In what ways are negatives formed? What is the rule for double negatives? Has the following sentence an affirmative equivalent? "And we feel no assurance that she is not destined to see the end of them all." In what do the following sentences differ from each other in meaning? (*a*) If my friend lives in Philadelphia I will visit him. (*b*) If my friend live in Philadelphia I shall visit him. Show, by means of sentences, the correct and incorrect use of pleonasm. Correct the following sentences: "Theism can only be opposed by polytheism." "In syntax there is what grammarians call concord or agreement, and government." "These may be carried on progressively above any assignable limit." "The chief and fundamental rules of syntax are common to the English as well as to the Latin tongue." "Thus a circle, a square, a triangle, or a hexagon please the eye by their regularity." What in the light of grammar constitutes a perfect sentence?

MENTAL PHILOSOPHY.—What is a mental faculty? Give the classification of the powers of the intellect. What is perception? Distinguish it from sensation. Of what professional value to the teacher is a knowledge of mental philosophy? Primary truths: by what faculty furnished, and how distinguished from all other truths?

NATURAL PHILOSOPHY.—Define the terms hypothesis, theory, law, and force, as used in physics. A body weighs 15 pounds in air and 7 pounds in water: another body weighs 76 pounds in air and 12 pounds in water: how do they compare in volume? A body has fallen a distance of 2316 feet: how long was it in falling, what was its final velocity, and what was the distance passed over during the last second? How can the specific gravity of solids lighter than water be determined? A cubical vessel, each side of which is 2 feet, has a capacity of 500 pounds of water: what must be the bulk of a hollow vessel of copper, weighing 5 pounds, which will just float in this water? The specific gravity of absolute alcohol is .79. To what height will this alcohol rise in a Torricellian tube, when the mercurial barometer indicates a height of 29.75 inches? Explain how the height of a mountain can be approximately measured by the barometer, the thermometer, and the variation in the boiling point of water? Upon what do the velocity and intensity of light depend? What is meant by specific heat? Explain methods for determining the specific heat of bodies. State the theories of electricity. Describe the magnetic needle. To what variations is it subjected?

POLITICAL ECONOMY.—What was the origin of the Mercantile System? What is meant by the Balance of Trade? Name three forms of monopoly. What action, regarding monopolies, was taken by the English Parliament during the reign of James I.? Name some advantages and some disadvantages resulting from division of labor. How are labor and capital mutually dependent upon each other? Are "strikes" useful? How are the agricultural and manufacturing interests of a country related? Does the introduction of improved machinery affect labor favorably or unfavorably? Why? When was the first United States Bank chartered? Describe the national bank system of 1863. What is the distinction between a tariff for revenue and a protective tariff? What is meant by "funding a debt"? Mention some of the peculiarities of the English National Debt. Distinguish between a direct and an indirect tax. How do specific duties differ from *ad valorem* duties?

ASTRONOMY.—By what methods can the earth's diameter be computed? Name the elements of the orbit of a planet. How can we determine the distance and size of a heavenly body? How is the precession of the equinoxes produced? What is meant by the equation of time? Name and describe the Northern circumpolar constellations. What curves are described by comets? What must be the form of its orbit in order that a comet may have a periodic time? State Bode's Law. Give Kepler's laws of planetary motion. What is meant by the "problem of the three bodies"? How is the eccentricity of the earth's orbit determined? Is it a variable or invariable quantity? Regarding the mean distance of the earth from the sun as a unit, the mean distance of Mars from the sun is 1.5237: required the periodic time of the latter?

U.S. CONSTITUTION.—Name and describe the three forms of colonial government. What attempts were made to unite the colonies before the meeting of the First Continental Congress? What were the most prominent defects in the Articles of Confederation? What states recommended amendments to the Consti-

tution upon its ratification by them? How may an alien become a citizen of the United States? What is meant by expatriation? What restrictions are placed upon the power of Congress? Name the departments that have been established for the purpose of aiding the President in discharging his duties as Chief Executive. What territorial officers are appointed by the President? Name the different Bureaus found in the Department of the Interior. Describe the manner of electing the President of the United States. What is the mode of impeaching a President?

PHYSIOLOGY.—Define nutrition, absorption, and secretion. What fluids aid digestion in the stomach? What fluids aid intestinal digestion? Describe the structure and functions of the lacteals and lymphatics. What objects are accomplished by the circulation of the blood? Name the different classes of circulation. Give a full description of the structure and functions of the arteries, veins, and capillaries. What is meant by nerves of motion and nerves of sensation? What is a gland? Name and locate five important glands found in the human body. How do the cerebrum and cerebellum differ as to their size, structure, and functions? Describe the retina and give its office. Give the structure and functions of the vocal organs, including the vocal chords.

BOTANY.—What is elaborated sap? Give its chemical composition. What is meant by cellular tissue? Describe a plant cell. Define morphology, venation, and æstivation. Name and define five forms of inflorescence. Name the parts of a flower and their subdivisions. How does a complete flower differ from a symmetrical flower? What constitute the living parts of an exogenous shrub or tree? Name and define the different kinds of fruit, and give an example of each kind. Compare the stems, leaves, flowers, and embryo of exogens and endogens. How does the natural system of classification differ from the artificial system?

ZOÖLOGY.—Name and describe the great branches of the Animal Kingdom. Compare the digestive organs of the Carnivora with those of the Ruminantia. What is meant by a fossil species? A typical animal? Describe the respiratory and digestive organs of Birds. Describe the organs of sense as found in Fishes. Give a description of the different stages in the life of an Insect. What are the general characteristics of Reptiles? Name the different orders of Reptiles. How is the spider's web formed? Is silk an animal or a vegetable product? What is a Polyp? How is coral formed? Give a brief description of the animal life of each grand division of the earth?

THEORY AND PRACTICE.—What is your method of teaching beginners to read? How do descriptive geography and map studies compare in importance? What grammatical instruction should be given to pupils before they are required to study from a textbook? What are object-lessons? What is meant by objective teaching? How does education differ from knowledge? Upon what principle is taxation for school purposes justifiable? Name what, in your opinion, are the prominent defects in our graded school system. By what means could the character of the instruction given in ungraded schools be improved? What are the duties of a teacher to his profession? What work on teaching do you esteem most highly? Give reasons for your preference.

ORTHOGRAPHY.—Define accent. When a word has two accents, how may the primary accent be known? What is the use of syllabication? Name the consonants that cannot be doubled at the end of a word. How are words formed by adding the termination *less* to words ending in double *l*, written? Write the present participles of *tie*, *dye*, *die*, and form derivatives from *icy* and *mercy*. When a word ending in *y* preceded by a vowel takes a termination, what is the general rule for the *y* in derivatives so formed? Why is the letter *k* inserted after *c* in certain derivatives? Write three rules for the formation of plural of nouns. Give two rules for writing the possessive plural of nouns. Name ten words that admit of different modes of spelling. Give general rules for writing compound words.

UNITED STATES HISTORY.—Give an account of the English discoveries in America before Jamestown was settled. What was the usual route traversed by the early navigators in attempting to reach the New World? How were the Virginia colonists affected by the English Revolution that led to the execution of Charles I.? In what wars were the colonists involved prior to the American Revolution? What were the terms of the treaty that terminated the French and Indian War? What territory has been acquired by the United States since Washington's administration? How many States have been formed from the Northwest Territory? From the Territory of Virginia? Name some of the most important events in the political history of the United States. What was the condition of political parties at the presidential election of 1860? What new territories, west of the Mississippi, have been organized since Buchanan's administration?

GEOGRAPHY.—Outline some system of map drawing adapted to class work. Describe the drainage system of North America. In what respects is Europe better adapted to commercial enterprises than Africa? Different causes that affect the Flora of a given region. Between what isotherms are the different cereals best grown? (Answer generally). What are the mountain systems of North America? Some of the natural causes for the location of large cities in modern times. Influence of the Gulf Stream upon the climate and productions of Northern and Western Europe.

CHEMISTRY.—Distinguish chemical affinity from other molecular forces. Describe in words and represent in symbols the effects of heat upon nitrate of ammonia. Give some account of the chemical properties of the gaseous product. Outline the process for obtaining sulphuric acid, explaining the chemical changes which occur. Explain by symbols the reactions which take place when O is prepared by the action of heat upon the $Mn\ O_2$ and $KO, Cl\ O_5$. How is N prepared? Under what conditions will it combine with O, H, and C? What is the composition of the atmosphere? By what means is the uniformity of its composition maintained? How many grains of nitrate of silver are required to decompose ten grains of chloride of sodium?

LOGIC.—Define Intuitions, Thoughts, Fundamental Laws of Thought. Concepts and their classification as to quality. Compare Judgments and Concepts. Induction and classification into Formal and Real. What is a definition? Exemplify. Difference between *a priori* and *a posteriori* arguments? Point out the fallacy in this: Three and four are two numbers. Seven is three and four. Therefore seven is two numbers.

RHETORIC.—What is meant by Purity of Diction? Define a Barbarism. What is meant by the Unity of a Sentence? Difference between a Metaphor and Simile? What is a "mixed Metaphor?" Exemplify Apostrophe, Personification, and Hyperbole.

What are some of the points necessary to Sublimity in Writing? Difference between Humor and Wit? What is meant by the "Unities of the Drama?" What governs the length of the poetic foot in English Verse? Difference between Iambic and Trochaic foot? Between Anapæstic and Dactylic?

MINERALOGY AND GEOLOGY.—What is understood by a Mineral? Mention some of its characteristics. How is the degree of hardness of a Mineral determined? Definition and classification of Rocks? Some of the means of determining the chronological order of strata? Name in chronological order the sub-divisions of Geological time. Animal and vegetable life characteristic of the Niagara Period. Characteristic plants and animals of Mesozoic Time. Animals of Cenozoic Time. What are the agencies which have produced the changes in the earth's crust treated of in Geology? Mention some of the effects of aqueous action in producing changes of surface.

METHODS OF RECITATION.

THE method by which a teacher conducts a recitation determines largely the method a student will use in preparing for it, and the key of reciting to a certain teacher is soon discovered by the pupil and taken advantage of. Granting this, the method of conducting a recitation is of great concern both to teacher and pupil; for, as a rule, as one is required to recite a lesson so will he study it, and as he studies it so will it profit him.

Among several distinct methods of recitation there are three which are most important in shaping the mind of the learner:

I. *The Categorical or Questioning Method*, which was so popular with Socrates, has never wanted admirers. Skillfully used it is beneficial; exclusively used it is very injurious to the student's interest. This is the method to which teachers naturally gravitate. Few are able to use this method extensively without falling into habits which the student is not slow to discover and to take advantage of. Unconsciously questions are asked in such a way as to suggest the answer, or at least to leave an alternative, in which case the pupil, from the circumstances connected with the question, and its general tenor, stands more than one chance in two of answering correctly whether informed or not. Relying on this sort of questioning students often scan over a lesson, gaining a cursory view of it, and then depend on getting a suggestive or alternative question. Add to this method consecutive questioning, and little more than a lot of disconnected facts result. A recitation of this kind develops little of originality or interest.

II. *The Topical Method.*—This method, where it can be used, is preëminent for developing thought and self-reliance. It places the pupil face to face with his subject, where he must succeed or fail according to his knowledge and ability to express himself. This method is a sure test of one's understanding, for he is dealing with a connected whole, not with disconnected parts. He is after ideas, not the words of the text-book. It necessarily develops a nice use of language, and cultivates a free and accurate expression of thought; and every recitation becomes a drill in public speaking. More discipline can be obtained by reciting in a standing position—by being required to speak and think on one's feet. It requires much more self-control to recite standing, than sitting in some obscure corner; and the stimulus which this independent position gives, makes success or failure more prominent.

The old saying that "one does not know anything as he ought to know it, until he can tell it as he ought to tell it; and he cannot tell it as he ought to tell it, until he knows it as he ought to know it," though rather severe, is nevertheless true. We often hear it said "I know it, but I can't tell it." This may be so, but such knowledge is of no satisfaction to any one; it is about as valuable as is Captain Kidd's treasure in the markets of the world.

In using the topical method successfully, a teacher must study the attainments and dispositions of the class, and be ever ready to give confidence to the discouraged and to help those who stumble. At suitable places questions may be interjected, directing the attention to special thoughts or omissions, but never so as to relieve the pupil of the responsibility of failing or succeeding for himself. Such a recitation should be followed by class criticism and a proper amount of discussion, when the teacher should be free to sanction or criticise, ask a question or explain a difficulty.

III. *The Discussion Method.*—At proper times pupils should be allowed to defend their views briefly and pointedly. The disputed ground may be sharply contested on certain occasions; when the pupil should be taught to yield gracefully to the force of reason and facts. In this way he learns to respect the opinions of others without sacrificing his own. And when one has learned to treat an opponent fairly and with respect, he has a rare and valuable attainment. As a means of obtaining clear thought and ex-

pression, and inciting interest, this method stands high, and is an effectual check to cramming and memorizing words without ideas. Used as a supplement to the other methods, it breaks up monotony and reveals sophistry and shallowness. But the teacher must stand at the helm to direct, or confusion will swamp the class.

The best teacher combines all these methods, or rather makes the topical method the basis of the recitation and supplements it by judicious questions and discussions. The results of a recitation after this manner cannot be shown by "marks;" but it can be marked by permanent results in the way of discipline, self-reliance, and by clear, vigorous thought and expression.—*Campus.*

THE BIBLE IN SCHOOL.

THE removal of the Bible from our schools is advocated on the ground that it is a Protestant book; and again, that it is contrary to American ideas of liberty and equal rights to force such a matter upon any parties against their will. These seem to be the two standing objections against Bible reading in our schools. But "facts are facts," and the Bible is a Protestant book in no other sense than that the sun is a Protestant sun, or that the moon or stars are Protestant. Protestants, indeed, love the Bible for its light and truth, just as they do the sun for its light and heat; and if there are those who refuse that light, it is surely no fault of Protestants. To the Bible, Protestants think they can trace the grand principles of freedom and equal rights which all Americans hold dear; but that fact makes the book no peculiar possession of theirs. They, in fact, received it from (or through) the Roman Church. The question of versions, every scholar knows, is more a matter of philology than of religion.

In the next place, Bible reading is not forced on any against their will. Children whose parents do not wish them to hear the Bible read are allowed to absent themselves from the school at the time such reading is done, and the instances of this kind are few and far between. There is not one school in fifty, probably not one in five hundred, where there has ever been any trouble on the subject. The vast majority of the parents prefer to have the Bible read, or at least have no objections to urge. Where then is the necessity for any one—and least of all for a Protestant—to advocate the removal of the Bible from any of the schools? What other object can such action have than to procure a law expelling the Bible and prohibiting its use in all of the schools? And what sense of liberty and equal rights have they who can coolly force Bible reading out of hundreds of schools where all the people want it? It is forced on nobody now, but the proposed measure would force it away from thousands against their will!

Many seem to forget that Protestants may also have a conscience on this subject. The intense feeling shown by a majority of Protestant ministers and people over the proposal to "expel the Bible," is evidence that millions of consciences would be hurt by such a violent measure. This feeling may be called bigotry and narrowness, but I submit whether, in view of all the facts in the case, the Protestants have not consciences which others are bound to respect!

As for the oft-repeated assertion that the home and the church are the places for Bible reading, and that these should be the custodians of the religion and morals of the young, it may be well to suggest the fact that not a few of those for whose special benefit free school education has been instituted have no religious homes and never enter churches. Many of their homes are actual nurseries of vice and crime, and the least the State can do is to provide that they may occasionally hear the commandments of God. Thus the practice of Bible reading, now so prevalent, oppresses no one, while it may provide the sole religious instruction of multitudes. *Christian Patriot.*

EDUCATION OF THE CITIZEN.

A RECENT speaker upon the subject of the education of the young, refers with just censure to sordid views of education. Such views are common to all classes, though in all there are parents who recognize the higher aims of mental culture. The sordid view says: My son will command no better day wages, or weekly salary, or business commissions, for any education he may acquire beyond the rules of arithmetic, the footing up of bills, the entries in his memorandum books and the calculation of interest, etc. Money is the main thing. How, in the first place, to acquire, in the next, to save, and in the next, to invest, if not the "whole duty of man," is, according to their views, the main purpose of education.

Now, to dispute the importance of money,

the grand key to all human bodily comfort, would be folly. But to mistake the means for the end is folly also. "Put money in thy purse" is a sensible maxim. Yet money in the purse is as valueless to the owner who does not know how to improve it, for his mental improvement and rational pleasure, as the jewel in Æsop was to the fabulous hen. Scratching up a jewel was nothing to the hen that could not eat it; and money is nothing to the man who cannot therewith minister to his higher happiness, to his usefulness in society and to his intelligent performance of his duties, political and social.

In every important election one unfortunate circumstance is the ignorance of many voters, whose votes still count for as much as the ballots of those who are capable of understanding the issues involved in the result of the canvass. There are men on all sides who have studied and reasoned out the questions which are involved. Let them vote as they may, their expression of opinion is in accordance with the true theory of our government. They are exercising their rights in the intelligent and proper way, which the fathers of the Republic assumed that all citizens would. In that exercise they are proceeding with an understanding of the issues at stake. The reason for the vote they cast is satisfactory to themselves, and the enlightened judgment of all qualified voters—qualified in the wide and only true sense—has a claim to full respect, whatever it may be. Few men are entirely right in their political opinions, and but few are entirely wrong. When intelligence marks both sides in a canvass, the defeated are prepared to acquiesce with cheerfulness, for they are bound in decent modesty to admit that they are not infallible, and to concede that, though they fail, wisdom will not die with them.

In this second century of the Republic retrospection is useless, except as a guide to forecast. The right of suffrage is possessed by every male resident citizen of adult age, and there are not a few among the people who would rather extend the right of suffrage to every woman also. Quite as important a question as the extension of suffrage is before us, and that is the promotion of higher views of the right exercise of suffrage by those who already possess it. No sordid view of training and education will answer. Arithmetic may compute majorities, but it cannot gauge the capacity of candidates or estimate the value of political doctrines. Arithmetic may do even worse than scan election returns. It may indicate to the selfish or dishonest man what direct or indirect profits in dollars and cents, present or prospective, may result to him individually by a vote in a particular direction.

The true desideratum is to obtain such a just and liberal and unsordid idea and application of the means of education as will realize the theory of Republican government. Every step in this direction is a positive gain; every lapse is a positive damage.

Phila Ledger.

WRITING vs. DRAWING.

FEW who have taken the least interest in these arts, have failed to notice with a certain surprise what awkward and inelegant letters are often inscribed by artists when setting their names in a corner of some finished piece of drawing and painting. Do they disdain the forms that we admire in script, or are the common script and drawing in any sense antagonistic to each other? That this last is the case, seems to have further proof in the opposite fact, that a good writer, who tries to sketch, gets his work aslant like his writing, and finds that when he wants to draw towards the left side he is all at once, as it were, left-handed and incapable: neither eye nor hand have learned how to estimate or make moves in that direction. He can work only to the "right oblique!"

English hand-writing has varied greatly in the course of centuries. The writing of 500 years ago is quite undecipherable to any one but a trained expert, and I have a family record before me now in which there is writing over two hundred years old, in very neat "secretary hand," but between the spelling and the forms of some letters it is a puzzle to the uninitiated. We have all become familiar with fac-similes of the honest plain round-hand of one hundred years ago. Since then our writing has been much vitiated by flourishers, and shaders, and angularists, but it is recovering, and tending again towards the plain, unflaunting, easily-read round form which has prevailed with only intervals of meretricious style since it first took a distinctive character.

The now very general practice upon the characters used in phonography is doing much to render common writing more chaste, more exact, more free from interference of strokes—from equivocal forms, from angles that should be hooks and from hooks that

should be angles, from both meaningless superfluities and vexatious ambiguities. For in stenography every change of direction or length or form has necessarily its meaning, and short-hand writing that is ever to be read *must* strictly use no other than the exact tracings required. This rigorous requirement of precision and exactitude, conjoined with the geometrical character of the outlines and their great variety of combination, seems to supply the missing link between the writers' art and the draughtsman's and makes the lowlier pencraft a handmaid to the higher art. For I have observed through an intimate experience of thirty years that learners who have had an early and effective drill in these geometric characters and their combinations not only become peculiarly clear and legible writers, but also acquire such ambidextrousness in the hand, and such experience in the eye, as to be capable of copying or sketching any strange outlines that present themselves; in short, to have attained incidentally an ability to draw which is often a most gratifying surprise even to the learner himself.

German writing is extremely angular and oblique and full of flaring loops and lance-like strokes with tiny angular ticks intervening. The famous Gabelsberger stenography preserves some features of the common hand, but, having proved its general faultiness, the Germans themselves have become inclined to change both it and their equally faulty type. Schools are announcing that they teach "English round-hand," and publishers are printing more and more of their issues in the clear and open Roman type.

All this progress is under way, in actual momentum, and therefore bound to continue in motion unless some greater combination of weight and velocity shall oppose and either divert it or stop it, or send it *retrorsum*. There is no such power of opposition apparent, and doubtless Prog'ress will progress' with gradual but steady and sure advance, and in its future course will grind off the angularities of English spelling, and thus smooth the way into our literature, not only to foreigners, but to our own youth, thousands of whom fail in that first heart-wearying task of learning to pronounce English words from paper. W.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, AUGUST, 1877.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

THE STATE ASSOCIATION.

THE twenty-fourth annual session of the Pennsylvania State Teachers' Association will be held at Erie, August 7th, 8th and 9th. The following programme of business is republished from our last issue. We hope to see a large attendance of school officers, teachers, and other friends of education. The Erie meeting should be a very good one.

PROGRAMME.

TUESDAY, AUGUST 7TH.

10 A. M.—Opening Exercises. Address of Welcome by Supt. H. S. Jones, of Erie. Reply. Enrollment of Members. Reports of Committees. Reception of Delegates from Gounty Conventions or Institutes. Miscellaneous Business.

2 P. M.—*President's Inaugural Address*—Prof. George L. Maris, Principal West Chester State Normal School. *Relation of Colleges to Common Schools*—Dr. Thomas G. Apple, Franklin and Marshall College. Discussion of President's Inaugural and Dr. Apple's Address, on the general subject of Higher Education.

8 P. M.—*Pedagogical Museum*, an address by Dr. S. P. May, of the Educational Department, of Toronto, Ontario, Canada. Discussion of the afternoon continued.

WEDNESDAY, AUGUST 8TH.

9 A. M.—Paper on *Resolutions laid over at West Chester*—Prof. Sensenig, Indiana State Normal School. Discussion. Paper on *Teachers' Personal Culture*—by Prof. Caughey, of Lafayette College.

2 P. M.—*Teachers' Tenure of Office*—Supt. V. G. Curtis, of Corry, Pa. Discussion.

8 P. M.—*The Cultivation of the Imagination*—Mrs. Supt. Rickoff, Cleveland, Ohio.

THURSDAY, AUGUST 9TH.

9 A. M.—*The Educational Problem among the German Element*—Supt. Samuel Baer, of Berks. Discussion.

2 P. M.—*County Institutes*—Dr. George P. Hays, of Washington College. Discussion. Miscellaneous Business.

8 P. M.—Addresses by Distinguished Educators from abroad and by members of the Association.

R. K. BUEHRLE,
Chmn. Ex. Committee.

LOCAL ARRANGEMENTS.

Association will meet at Erie County Court House. Hotel accommodations can be obtained at the Reed

House and the Ellsworth House at $2.00, $2.50 and $3.00 per day, according to location of rooms. These houses are roomy, under the same management, located near the Court House, and are ranked as first-class. Persons desiring lower rates will please address H. S. Jones, chairman of the local committee.

RAILROAD ARRANGEMENTS.

Persons having orders from the Ticket Agent of the Association, can procure excursion tickets at the principal stations on Allegheny Valley, Buffalo, Corry and Pittsburgh, Belvidere Delaware, Northern Central, Philadelphia and Erie, Pennsylvania, and Danville, Hazleton and Wilkesbarre.

The following will have excursion tickets for sale at the principal stations without orders: Berks and Lehigh, East Pennsylvania, Philadelphia and Reading, Reading and Columbia, and Catawissa and Williamsport.

Persons who pay full fare in going over the Delaware, Lackawanna and Western and Delaware and Hudson railroads, can procure passes at the meeting, to return free.

The Cumberland Valley railroad will sell excursion tickets upon application by letter to A. H. McCulloh, General Agent, Chambersburg, Pa.

SPECIAL.

The Pennsylvania Railroad will run a special train from Philadelphia to Erie and return, if the number who desire to go be 300, at the low rate of ten dollars each.

In order to consummate this arrangement, it is desirable that each person going from Philadelphia shall immediately inform the Ticket Agent, that suitable arrangements may be made.

By a little exertion on the part of the teachers of Philadelphia and the adjoining counties, this number would, no doubt, be readily raised.

The excursion from one end of our noble State to the other, will well repay any teacher who will participate with us.

For orders apply (stamp enclosed), giving railroads and name of stations, and for membership tickets, enclose one dollar with stamp on or before July 24th, 1877, to

J. FLETCHER SICKEL, *Germantown, Pa.*

SOME changes have been recently made in the Principalship of our State Normal Schools. Prof. George P. Beard has assumed the Principalship of the California school in place of Prof. C. L. Ehrenfeld, resigned to accept a position in the Department of Public Instruction. Prof. N. C. Schaeffer, of Franklin and Marshall College, takes the place of Rev. A. R. Horne at Kutztown. And Prof. F. A. Allen resumes his old position at the head of the Mansfield school, *vice* Prof. Verrill.

The new principals have all had experience in the Normal School work. Prof. Beard has served at the head of Normal schools both in Missouri and in this State, Prof. Allen is a veteran in the service; and Prof. Schaeffer was for some time acting Principal of the Kutztown school, where he gave evidence of rare qualifications for such a position. He has had fine opportunities of study, both in this country and abroad, and we have little doubt that he will speedily place his school, in all respects, alongside of the best in the State.

THE dogmatism of the "genuine" kindergartener is amazing. He assumes that no one is right but himself, and those who think with him, and no words in the English language are too severe or bitter with which to denounce any one who dares to depart a hair's breadth from what he understands to be Frœbel's system. For a specimen of the kind of abuse heaped upon one who is trying to teach little children in her own way, see an editorial in the May number of "The New Education," Milwaukee, on Miss Coe's "American Kindergarten." Why these angry words? Why these contemptuous expressions? We always suspect the soundness of a system that must be advocated in this violent way.

YALE College recently conferred the honorary degree of A. M. upon Artemas Martin, of Erie, in this State. Mr. Martin is a gentleman of forty-two years of age, self-educated, and lives on a small farm near the city of Erie. He is a market-gardener and sells vegetables through the streets of the city twice a week. But between his hours of labor he has found time to make himself one of the most profound mathematicians in the country. He is a regular contributor on mathematical subjects to some of the leading educational magazines, both in this country and abroad. His mathematical library is large and valuable. Mr. Martin has pursued his studies in such a modest and unassuming manner, in connection with the work on his farm, that even his nearest neighbors scarcely suspected that he was laying the foundation for a position among leading mathematical thinkers. Yale College has honored herself by granting him a degree.

WE see it stated that, at the State Normal School, of Nebraska, the custom prevails of having a "Students' day" in each term. On this day the school is managed exclusively by students. A principal is elected from among them by ballot, the whole school voting, and in like manner each class elects a teacher. For the day the student-

faculty have entire charge of the school, and the regular faculty receive the treatment of visitors. Students' day is considered one of the *best* days of the school.

LA REFORMA, the Journal of Public Instruction and organ of the Academy of Teachers, Madrid, Spain, reaches us regularly. In the number of June 22d, *The School Journal* is complimented as follows: "We have received, in exchange, that magnificent periodical of primary instruction, *The Pennsylvania School Journal*, organ of the Department of Public Instruction, and of the State Teachers' Association, which is published at Lancaster, United States. Such is the power and influence of periodicals of this kind in America, that they necessarily imply the idea of a system of public instruction at once grand in its proportions and munificently supported. The latest number of the *School Journal* that we receive, always seems to be the best."

THE special session of the State Normal at West Chester is a success, both in the number of students in attendance, and the character of the instruction imparted. Addresses were delivered at the opening by Hon. J. J. Lewis, President of the Board of Trustees; Hon. Washington Townsend, Hon. P. Frazer Smith, and Messrs. May, Sharpless, and others.

AN experienced County Superintendent makes the following suggestions in regard to Teachers' Institutes:

1. How can a superintendent have the attendance and presence of his teachers at the sessions of the institute? I use attendance cards, which I require to be placed in an open box on the president's table as soon as the holder enters the Institute rooms. This card is marked thus (‡) if in time; if tardy (†). These cards are given back at the close of each session to be again returned. If teachers complain of the irregular attendance of their pnpils, their directors have in this way a chance to see if they, the teachers, would be prompt.

2. Get rid of lecturers whose first object is story-telling. Too great care cannot be exercised in the character of the instructors—lawyers and ministers, unless they have been teachers, are generally too pointless as instructors. I have no patience with mere theorists. Some of the best work of the institute just closed was done by our own teachers. The teachers of our primary schools said, at the close of our institute, "We have had all our difficulties met this time."

3. Assign work for the teachers, and all others not from abroad, who instruct or lecture at the institute. I assigned twenty-five referred questions to be answered, and sixty-one subjects for papers of eight or ten minutes' length. The papers and many of the queries were discussed by others than those to whom assigned. In this way we were able to begin and carry on the work of the institute at Duncannon from Monday at 1 p. m. till 3 p. m., on Tuesday, without assistance. The advantage of this method is that the teachers are in more active sympathy with the work of the institute. If the work is assigned, two persons will not have the same subject.

4. I am decidedly in favor of more than one section at a county institute. In a large institute of 130 teachers about one-fourth will engage in the work, while the others will be kept in the background as listeners and go home at the close without much benefit. At the institute held in Millerstown but two of the fifty-five actual teachers did not engage in the discussions. If an institute is held at the county-seat for a series of years, persons distant from it who do not attend will come to look upon it with disfavor. Old men of this class came to me at the close of the Millerstown and Landisburg institutes and said, "We have attended the institute for the first time, and believe it a good thing."

We had one hundred and sixty-three referred questions answered at the last institute, and thirty-seven papers read, besides the work of the instructors from abroad.

PROF. J. A. COOPER, of the State Normal School at Edinboro, having put his house in order at home by improving the course of study, strengthening the faculty and organizing and equipping an excellent model school, is looking abroad for the support his efforts deserve. He has addressed the following letter to the Pennsylvania colleges:

EDINBORO, PA., June 13, 1877.

The authorities of the Normal School have decided to make the school strictly professional. We desire, as students, hereafter only teachers and those who intend to teach; other students should go elsewhere. With the opening of the next school year we shall be prepared to offer a course of Professional study to College graduates. It will embrace those subjects which they need to understand in order to be skillful teachers and successful town, county, city and borough superintendents. Have you students who intend to become teachers? Can you not advise and persuade them to spend a year here in professional study after graduating with you? Is it not as necessary to study teaching before beginning to practice it as to study law before attempting to practice law?

Yours truly,

J. A. COOPER.

The several county superintendents have also been addressed in the following:

DEAR SIR.—I have read with care the report of your deliberations at Harrisburg in April last, and believe that great good will result from your meeting. But there is a question—the great question of American Education—which does not appear in the report. It is, "How shall we secure a supply of good teachers?" This is the most important of school questions, because the teacher makes the school. A poor teacher cannot teach a good school, though you provide good houses, books, systems, methods, supervision, institutes, etc.

Teachers should be prepared for good work before

engaging to teach. Then other good things will make good schools. It is a waste of time to examine, supervise and institute poor teachers.

Says Prof. W. F. Phelps, in the *Educational Weekly*, "Neither institutes nor other temporary means can furnish a supply of able teachers. Permanent training schools only can do this." Let me ask your assent to the following propositions:

1. The teacher for the times must be thoroughly educated and trained.

2. Teachers can be best trained in thoroughly equipped and permanent training schools.

3. All school officers and educators should encourage every young man and woman of teaching talent, who proposes to teach, to take a course of instruction in a teachers' school.

4. If as great an effort were made by school officers to persuade teachers to attend the State Normal Schools as is made to draw them to the county institutes, many more would attend the Normal Schools.

5. The schools of a county will improve faster by having sixty young teachers in regular attendance at one of the State Normal Schools than by having all the teachers attend the county institute.

6. In counties where the largest numbers attend the State Normal Schools there will be the best county institutes.

Inviting an expression of assent to these propositions, or dissent from them,

Yours truly, J. A. COOPER.

To the County Superintendent of————

FROM the Seventh Annual Report of the Board of Trustees and Officers of the Ohio Soldiers' and Sailors' Orphans' Home we learn that about six hundred of this most deserving class of orphans are now under the care and instruction of the State at this institution, the only one of the kind in Ohio. While the good work of caring for the orphans of soldiers is done in our sister State on a much smaller scale than in our own, yet we were very much interested in the report, especially in that part of it relating to the experiments being made in industrial education. For various reasons we have not been entirely satisfied with what we have done in this respect in our soldiers' orphan schools. Besides, the question of industrial education has much broader application than to one class of schools. Public sentiment seems to demand the incorporation of an industrial feature into our general systems of common school education, and it is very desirable that any action taken in this direction should be wisely taken. We, welcome light from all direction.

The Soldiers' and Sailors' Orphans' Home in Ohio, unlike those in Pennsylvania, is owned by the State, and is managed entirely as a State institution. There is a farm connected with it. We gather the following facts from report of the Board of Trustees:

The farm is well tilled. With the exception of the farmer and gardener the work is all done by the boys. With little outside help the shoes for the inmates are made and repaired by boys in the shop at the Home.

The tin-shop is more than self-supporting. A school of telegraphy, in which both boys and girls are well instructed, is a great success, and at but little cost.

A printing office is successfully operated, and may now be made a source of revenue. The children's clothing is all manufactured at the Home, a material portion of the work being done by the children themselves. The Board are of the opinion that all the children in such a Home may be taught trades with little actual cost to the State.

Mr. Shaw, the superintendent, says in his report, "The progress made by the girls and boys in the five industrial departments already established, has been in the highest degree satisfactory. The results, pecuniarily, are all that could be expected in so short a time. The foremen and instructors in the several industrial pursuits have shown a most commendable zeal and earnestness in imparting instruction, and in conducting their departments so as to render them as remunerative as possible."

The detailed reports of the tinner, printer, foreman of the shoe-shop, butcher, baker, gardener, farmer, etc., are very interesting to us, and seem to indicate the success of the experiment.

IN the June number of *The Journal* the following remark is credited to Supt. S. H. Prather, as made at the convention of superintendents which met recently at Harrisburg: "I am accustomed to work most of my time in school, taking one class while the teacher takes another." Of course, he meant that he conducts one recitation in order to exemplify the methods he prefers, and after such has been *finished*, the teacher hears the next, so that his skill or lack of skill may be determined, to the end that any suggestions to him may be "as words fitly spoken."

A PRIVATE letter received from Dr. Philippe da Motta, the Brazilian Centennial Commissioner, informs us that he has reached Holland, and is now engaged in studying the condition of education in that country. The following is an abstract from his letter:

Holland is a very fine country, and the inhabitants are an industrious, hardy, and well-educated class of people. The climate is rather damp, owing to the

exposed in their homes to all the evil influences of bad drainage and foul air, and that they are of an age when the developing constitution is peculiarly susceptible to injury from such causes, the importance of securing for them, during school hours at least, pure air and healthy surroundings, cannot be denied. The Sanitary Inspector of Schools—and we hope that his powers will be extended over all schools, public and private—can investigate and remedy every defect in the buildings occupied by our children. If he will be, as he ought to be, an expert in sanitary matters, and is cheerfully sustained by the Commissioners of Education and the local boards of trustees, we can look forward to reformation in the present sanitary system in the schools which will result in much benefit to the public health.

INTERNATIONAL EXHIBITION AT PHILADELPHIA.

EDUCATIONAL DEPARTMENT.

WE have received the following letter from "Teacher," a visitor to the educational department of the International Exhibition at Philadelphia. The account he gives of it is in no wise exaggerated. It is now well worthy of study; and when completed according to the original design, it will greatly exceed in interest any like display made last year at the Centennial Exposition. We shall in a future number give in some detail our own observations upon what has been done in this Department.

LETTER.

J. P. WICKERSHAM, LL. D.—*Dear Sir:* To-day we spent a few hours at the Permanent International Exhibition at Philadelphia. With the shadow of the great Centennial resting upon the enterprise, the management have done well, very well.

The arrangement is much better than last year. The visitor who wishes to make an intelligent study of the exhibits, has now a much better opportunity. Then he found the exhibits, in any particular group, scattered over a half dozen or more different buildings, and perhaps in as many different locations in each. Now he finds them collected into the great Main Building, and so classified and arranged as to admit of comparison and study

But the section that will strike as the most unique is the Department of Education. At the inception of the enterprise, the Directors, believing that the educational display of last year was not equal to its possibilities, called to their aid a Council of Education, composed of some of the leading educators of this and other countries, and the result is a display that will, when completed, exceed in scope and logical arrangement anything of the kind ever before attempted. Already is it acknowledged that this Department is the leading feature of the Exhibition. Eight school-rooms, representing a Kindergarten, a Sabbath-school, a Primary, an Intermediate, a High, an Ungraded rural and a Graded rural school, have been erected, and are now nearly complete with their furniture and appliances. They are all to be models of their kind, and school officers and teachers will find in these rooms much that will aid them in making our schools more nearly fitted for the work required to be done in them.

The Art section of the Department cannot fail to attract much attention. The Philadelphia School of Design, the Massachusetts Normal Art School, the Lowell Art School, and the Ladies' Art Association, afford the visitor a rare opportunity of judging of what these institutions are doing for art as applied to industry. No longer need our manufacturers go abroad for their designs, and no longer need any one be skeptical in regard to the great good that these institutions are doing.

Our Technical and Scientific schools are represented by very fine displays from Stevens Institute of N. J., Lafayette College, and the University of Pennsylvania. A very good opportunity is here afforded any one to learn something of the character of these institutions by a study of the representations they make of their appliances and the results they have secured.

In truth, we find in this Department something gathered from nearly every class of Educational Institutions. It may be a complete set of photographs, representing the buildings, grounds, museums, laboratories, conservatories, etc., of one of our Universities, as Illinois Industrial or Cornell, or it may be specimens of pupils' work from some humble wayside country school. Whatever it may be, it adds to the interest of the Department. Here the teacher has an opportunity of judging what is the best in any particular line of school appliances, as the Council are endeavoring to collect all things used in educational institutions. Text books are classified and arranged according to subjects treated. The same rule is observed in arranging the apparatus. A large collection of that is already in position, and constant additions are being made. Russia has promised a duplicate of the exhibit she made last year of her Pedagogical Museum. Those who saw that display will remember its great value. Japan also promises an exhibit of her educational appliances.

The section devoted to Natural History is as yet far behind its possibilities, but the Council have assurances that it soon shall be one of the leading features of the Department. Prof. Ward, of Rochester, N. Y., is preparing a very fine exhibit for this section.

It well be some time before our country shall build many school-houses after the style of the two Rural school buildings that stand in front of the Department, and many will question the wisdom of erecting such buildings; but the management no doubt believe that in order to elevate taste, those who lead are compelled to be extremists. Had they built after the style of the model exhibited by the Department of Public Instruction of Pennsylvania, many will say that they would have accomplished more for our country schools. The Department of Education of the International Exhibition would not have presented so fine an appearance, but it may have found more to utilize its ideas.

But should we attempt to describe or criticise every feature of this Department, our letter, already sufficiently long, would grow to undue proportions. Teachers will want to visit the Exhibition for themselves, and we have said enough, perhaps, to convince them that it is to their interest to do so.

Yours truly, TEACHER.

ONTARIO REPORT.

EDUCATION AT THE CENTENNIAL EXPOSITION.

THE first formal report on education at the Centennial Exposition to come into our hands, is that of the Province of Ontario, Canada. It has been prepared by the Deputy Minister of Public Education, Hon. J. George Hodgins, LL.D. The report contains three hundred and six pages, and includes a large number of engravings illustrative of the subjects presented. The whole is another evidence of the deep interest taken by our northern kinsmen and neighbors in the subject of education and the intelligent direction to whom the trust of its management among them is confided.

The friends of popular education in the United States, and especially the friends of popular education in Pennsylvania, have not forgotten the fine exhibit of her system and appliances of education made by Ontario at Philadelphia. In some respects it had no equal on the ground. Those who would expect from the same hands that prepared this exhibit a report equally indicative of enlightened views and a progressive spirit, will not be disappointed. Our regret is that copies cannot be had in sufficient numbers to place one in the hands of every school officer and leading teacher in this State. Much of it is as well calculated for usefulness here as in Ontario.

The plan of the report is comprehensive. It contains an account of the Ontario exhibit and system of education, together with accounts of the exhibits and systems of education of the most important countries in the world, with illustrative statistics of late date. These are accompanied with a series of valuable papers discussing education in its various features and from different standpoints, as represented at the Exposition. The report, as a whole, is catholic in its spirit, discriminative and just. It claims for Ontario no credit that would not at once be accorded by all those who know what she did at Philadelphia, and how well she did it.

Pennsylvania, at least, has no reason to complain of the position she is made to occupy in this report. In that part of the report which treats of the "Educational Exhibits of various States and countries," Dr. Hodgins states that he considers them in the order as it appeared to him, "of the comparative merit of their respective educational exhibits." At the *head of the list* he places the State of Pennsylvania, and then follows in the order named, Sweden, Russia, Switzerland, Belgium, Japan, United States Bureau of Education, France, the State of Massachusetts, the State of Ohio, the State of New Jersey, the Netherlands, Connecticut, Rhode Island, New Hampshire, Maine, Illinois, Indiana, Michigan, Wisconsin, Brazil, Norway. He adds: "The educational exhibit made by the State of Pennsylvania, was by far the most extensive and systematically arranged of all the school exhibits at Philadelphia." This is according us high honor, but we fear if Ontario appeared in the list we might be compelled to be content with a lower position. Two cuts of the Pennsylvania Educational Hall, a large and a small one, are inserted in the work, and many extracts are made from the addresses of our Superintendent of Public Instruction, our State school reports, and *The School Journal.*

QUESTIONS IN TEACHING.

THE Superintendents of schools sometimes complain that they can derive no profit from examining teachers in the theory or science of teaching. Believing that such an examination is vastly more important than the examination in any one branch of instruction upon which examinations are held, or than the examinations in all these branches taken together, we have been at much pains to inquire into the cause of its alleged fruitless character. We think we have found it, and having done so, we are impelled, by a sense of public duty, to state it in the plainest possible words. It lies in one of two directions; either in the direction of the superintendent's incompetency, or in the direction of the teacher's ignorance. It is evident that a superintendent cannot conduct a profitable examination upon a subject that he does not understand; and it is not less plain that no good can come from examining a teacher upon a subject of which he knows nothing. For one or the other of these reasons the examination of teachers in this State upon the subject of teaching, have been, in good part, of little account.

It has been the custom to ask a few questions concerning the mere externals of school-room work, and call it an examination in the science of teaching. The time has come, we think, for a forward move-

ment in this matter. Teachers are plentiful. Higher qualifications can be safely insisted upon. And ignorance on the part of the teachers of the leading principles upon which their whole work is founded, should be no longer tolerated. If a superintendent has not studied from the teacher's standpoint the nature of the human body and the philosophy of the human mind and their relation to the means calculated to develop and strengthen them, let him begin at once, and then let him use this knowledge as a lever to lift his teachers up to the same level. Without an effort of this kind, practical teaching must forever continue as a mere empirical art, without the least claim to rank as a profession.

To aid in initiating a movement of this kind, we insert below some of the questions asked in the science of teaching at the recent examinations of the graduating classes of the State Normal Schools They will serve to indicate the line of study to be opened up on this subject:

QUESTIONS.

1. In teaching a subject like Geography or Arithmetic to young children, why should we not commence with general definitions?
2. Explain the Socratic method of imparting knowledge.
3. What principle is violated in attempting to teach the objective case of nouns to pupils before they understand the properties of verbs?
4. What relation should punishments in school bear to the offences committed?
5. Point out the correspondence between the first stages of growth in the science of Arithmetic and the first steps to be taken in teaching the subject.
6. Wherein does the subject matter to be taught in a primary school differ from that to be taught in a University?
7. Explain the method of training children to have a better sense of right and wrong.
8. What is the fundamental distinction between intellectual and moral education?
9. What is meant by the proposition, "Methods of teaching should be suggestive?"
10. Name the first steps in teaching an empirical science.
11. Name the first steps in teaching a rational science.
12. Give an example of induction as applied in teaching.
13. Give an example of deduction as applied in teaching.
14. Show how instruction about a flower may be imparted both analytically and synthetically.
15. In what order must a subject like Grammar be arranged for the purpose of teaching?
16. Name the several purposes of the recitation in school in the order of their importance.
17. By what statements or arguments can you show the value of education?
18. Explain the purpose of Object Lessons, and point out the educational principles upon which they are founded.
19. Name the leading principle in Frœbel's Kindergarten system.
20. What is the most important characteristic of Pestolozzi's method?
21. Explain the philosophy of the word-method of teaching reading.
22. Name an objective law of teaching, and show how it is derived.
23. Name a subjective law of teaching and show how it is derived.
24. Explain the art of teaching as applied to the will.
25. Explain the method of culture as applied to the imagination.
26. Disprove Locke's doctrine that "the mind may be compared to a blank sheet of white paper."
27. What are the principal characteristics of child-nature?
28. In what order do the several mental faculties develop themselves relatively?
29. What should a child six years old be taught?
30. What is the relation between the genesis of knowledge and methods of teaching?
31. Point out the necessary limitations of the teaching process.
32. Define the words education, instruction, culture, teaching, pedagogics.
33. In what respects is teaching a science, and in what respects is it an art?
34. What are the ultimate ends of education?
35. What are the limitations of exercise as a law of mental development?

WHAT THE NORMAL SCHOOLS NEED.

NEARLY two hundred young ladies and gentlemen have just graduated at the several State Normal Schools. As a whole they constitute a body of young people creditable to the schools and from whom the State may reasonably expect good service. But, from our own experience at the recent examinations, we feel called upon to say in a public way two or three things to the authorities of these schools, in reference to the candidates they present for examination.

First, sufficient care is not taken to test the qualifications of those presented to the Board of Examiners for final examination. It is seldom that a teacher can make himself an impartial judge of the acquirements of the members of his own class. In addition to the very natural inclination to favor them, he unconsciously examines his class upon what he has taught them. Every teacher gives prominence in his work to certain parts or to certain points of a subject, and a knowledge of these naturally becomes his tests at an examination. Measured in this way, a member of a class may stand high, while if measured by the stand-

ard of another teacher or by his knowledge of the whole subject, he would occupy a much lower position. This accounts, in good measure, for the difference in their estimate of scholarship between the Faculty of a school and the Board of Examiners. It would be an excellent plan for the Principal of a school either himself to examine the members of the graduating class, or to have it done by some competent person, who has not taught them, before presenting their names to the Board of Examiners.

There is in the second place, too short a time spent in preparation. At some schools little is done for months but *cram* for the examination. No time is taken to digest what is learned; no opportunity is given for healthy intellectual growth. It is scarcely going too far to say that it would have been far better for one-third or even one-half of the two hundred graduates of the present year to have spent many months more of work upon the course of studies they now profess to have finished. There is an evident want of maturity, of breadth, of depth, of culture. The studies lie simply in the memory a huge mass of raw, undigested fragments. Surely, it is not the interest of the schools to press forward in so much haste these immature young people; and even if it is, the State whose desire it has been from the beginning to honor and reward the graduates of her Normal Schools, by giving them the highest positions in the teacher's profession, should step in and stop such an ill-advised proceeding.

But the change most imperatively demanded in connection with the Normal Schools is in the direction of training for the work of practical teaching. The law requires the establishment of model schools and both in its letter and spirit demands that no one should go out from a Normal School armed with a diploma, who does not possess both tact and skill in practical teaching. It is not too much to demand of an applicant for graduation an exhibition of such work with any grade of pupils, and in any branch of study included in the common school course. The recent examinations have shown that the teaching done in the very best of our model schools, by the members of the graduating classes, might be made vastly more effective, and that done in the poorest of them is worth little or nothing for the intended purpose. The matured fruit of a Normal School is good teachers. If such a school does not send forth fruit of this character, it must be pronounced a failure. With a test of this kind applied to the teaching of the graduates of the present year, a large number would have been refused diplomas. They may make good teachers, but if so, it will not certainly be owing to the advantages of this training in the model schools or to any skill they at present possess. There must be reform in this matter. The way is open for it. The State is disposed to treat the Normal Schools generously. But there must be a new awakening in this direction on the part of those who manage the schools themselves.

KANSAS FARMERS TO THE FRONT.

THE farmers out West seem to be disappointed with the management of the schools as well as of the railroads. For a year or more, the Kansas State Grange has had under consideration a "course of education adapted to the wants of common schools," and at its late annual meeting, at Topeka, adopted a report prepared by a committee on the subject. The report looks towards a change in the ordinary course of study pursued in the schools mainly in two directions; first, to make it in a general way more practical, and, second, to introduce into it some branches specially relating to the industries of the country.

The committee think their inquiries justify them in concluding that the educational work now done in the public schools, is, first, superficial in its character, second, defective in its method, and, third, narrow in its scope. They quote a great many authorities in all parts of the country upon which they base their opinion.

The report specifies the branches in which it is thought reform is most needed. We quote the "recapitulation" on this subject.

In Arithmetic it is proposed to abandon the memorizing of those numerous definitions, rules, and principles, so-called, which are valueless in the applications of numbers; and are never thought of in such applications. Instead of such memorizing, *practice* is to be substituted;—practice, so thorough that high attainments shall be made as regards rapidity and accuracy in all the computations entering into ordinary affairs of business. Practice, till habit shall obviate all necessity for rule.

Beyond those simple operations which enter into the keeping of common accounts, the computations in interest, the making of ordinary estimates, etc., all else shall be left to professionals in numbers.

In Geography, it is proposed to have our children taught to map their own school district, their town-

ship, county, state and country; enough of this to fix in their minds clearly defined descriptions of such local geographical divisions; so as to bring intelligence to their newspaper and other reading; an enlightened sense of the situations of localities in which current events of their own country occur. Besides thus much of local geography, just enough of the mapping and study of foreign countries as to enable the pupil to refer to his maps to find the localities of all important events, the subjects of reading and conversations, and generally, such a handling of the subject as to habituate the pupil to the use of a book of maps, which he should be taught that he must take with him from school as a life companion.

In English Grammar, it is proposed to abandon the whole memorizing and analytical business, and, by actual practice and training in correct speaking and writing, to habituate pupils in the expression of their thoughts in the English language, according to good usage.

Children learn to speak the English language from their mothers. Intelligent mothers teach their children to speak correctly, by pointing out right usage and pruning out vulgarisms. Transferred to the school-room the teacher should, and in the new education will, aid such instruction in the same manner and carry language study forward by pointing out whatever of grammatical rule comes within the comprehension of the pupil, and is applicable to the practice exercises of the school-room, and to the correction of all errors in language heard or written in or about the school-room. Thus those children who do not acquire correct speech at home will fall in with the current of correct speaking at school, and all will receive alike that culture in speech which alone comes from association with those whose aim is, in language as in all things else, to imitate and conform to the usage of good society.

The practice of writing should enter largely into the school work; in the study of orthography, reading, geography, arithmetic, as a means of engaging attention, and of inducing actual and systematic industry in the preparation of lessons, and at the same time of bringing pupils into a ready skill in the use of the pen and pencil, and in the execution of varied forms of written composition. Writing should continue to be practiced, among advanced pupils, till an ability shall be acquired to write letters of friendship and business, correctly and neatly, and to execute with readiness and propriety all forms of written composition which enter into the discharge of the ordinary duties of life and of citizenship. This and this alone is the character of instruction in English Grammar, suited to common school education.

In place of the parts of Geography, Grammar, Arithmetic, etc., omitted from the proposed course, these Western Grangers would introduce the elements of the natural sciences. They say:

Under such instruction, farmers' children will be taught something concerning the nature and composition of the soil which they are to till, and of its adaptation to the growing of this food-plant or that. They will be taught something of the formation of the rocks with which they build, and of the great system of rocks with which God has constructed the basis upon which the soil rests: systems too, which, through the disintegration, pulverization and comminutives brought about by the various changes which the forces of nature have wrought upon their substance, have contributed to, and in a great measure make up, the composition of the soil itself. The farmers' children will have unfolded to them the subtle laws by which the plants they are to cultivate draw their sustenance from the mineral kingdom, and create the food upon which man and animals live. They will be taught, and led to love to investigate Nature's works around them. God himself has implanted a love of investigation in the natural mind. It is because their teachers, and we, their parents, are ignorant of the way to direct their youthful searchings after Nature's teachings that our children do not grow up in continued research, and become very masters of the sciences connected with agriculture; the materials for the study of which are everywhere spread out before them from their earliest existence.

The committee recommend:

That instruction be required, of the most thorough character, in those portions of the old studies useful and necessary to all classes. It is recommended that portions of the old studies which have come into the schools under the plea of mental discipline, and which could never have had any higher claim for consideration than that they are disciplinary, should be discarded, and, in lieu thereof, that there shall be employed studies calculated to impart knowledge respecting those things which enter into the common affairs of life;—into the business and the pleasures of life; studies which explain the objects by which we are surrounded, which explain the laws of plant and animal life and growth, which explain the insects and the flowers, the rocks and the soils, the birds and the fishes, the water and the air, the clouds and the sunlight, the stars and, I might almost say, which explain the great Creator himself, who made all these things for man's use, for his study, contemplation and enjoyment. In place of the dry and soulless discipline of old abstractions, it is proposed to supply the study of those things which awaken thought, inspire a love of nature, and lead the minds of our children up to a contemplation of the greatness and wisdom and goodness of creative power.

And these Western farmers do not propose plans that they are not willing to help carry into effect. They fully realize that expensive agencies must be provided to make good the improvements they contemplate, and they generously proffer to pay the necessary taxes to support them. They want "country high schools" to enable their children to learn something in addition to reading, writing and arithmetic. They argue in favor of county normal institutes, and State Normal Schools to prepare teachers. They seem to think their children have already been too long in the hands of mere novices in the business of teaching. They see plainly enough that a school system cannot be effective without close, constant and intelligent supervision; and hence are in favor of able and well-paid superintendents for counties and cities. In short, these Kansas farmers seem to be fast marching to the front in educational matters.

BOOK NOTICES

BUTLER'S LITERARY SELECTIONS.—*Number Two of "Ten-times-Ten" Series. Designed for the School-Room and Family Circle. For Use in Public and Private Schools, on the Platform, at the Teacher's Desk, and by the Family Fireside. Pp.: 192. Price, by mail, Post-paid, 35 cents. Cloth, extra, 75 cents. Philadelphia: J. H. Butler & Co.*

The first number of the "Ten-times-Ten" of literary selections for school and home use, now issuing from the press of the Messrs. Butler & Co., of Philadelphia, gave promise of great excellence for the series. It has been so favorably received that the publishers pronounce it "a hit" from the beginning. But we do not see how it could be otherwise—containing, as it does, so many good things to give it force and character, and being sent anywhere by mail at a price so low. No. 2 of the series, advance sheets of which have reached us, will soon be equally well known. There are many who will vote it even a better issue than No. 1—and we are inclined to endorse this opinion. The selections are about equally divided between prose and poetry, and, as in the former book, perhaps one-half or more can be used as exercises in declamation, the rest, of greater average length, being better suited for readings than recitations. The new No. opens with "Tom Brown's Last Visit to Rugby," and closes (Selection 100) with a round dozen of exquisite songs, gems from the idyls, etc., of the poet Tennyson. This is preceded by ten select paragraphs in prose (Selection 99) any one of which would serve as a brief exercise in declamation. Among choice sketches we find Mrs. Stowe's "Little Edward," Dickens' "Child's Dream of a Star," and that exquisitely told story of "The Little Stow-Away," which to read once or to hear it well read, is to remember for a life-time. The longest selection, extending through twenty pages or more, is "The Song Without Words," some "leaves from a very old book," a delightful allegory, with all the fascination of a fairy tale, by the author of the "Schönberg Cotta" series. For full table of Contents of No. 2, the reader is referred to the July issue of this *Journal*, or to the publishers for circular. Books like this, combining profit with pleasure, attractive at home and at school, with an influence only for good, are what they deserve to be—a valuable possession always and everywhere.

WILLIS'S HISTORICAL READER.—*Based on the Great Events of History, from the Creation of Man to the Present Time. By Wm. Francis Collier, Trinity College, Dublin. Pp.: 376. New York: A. S. Barnes & Co. 1877.*

The design of this text-book is to give a sort of bird's-eye view of the history of the world, for the most part during the Christian era. The author, says, and very truly: "Many pupils leave school—some students even leave college—with great gaps in their knowledge of history. There are thousands whose knowledge of Europe, between the Fall of Rome and the Reformation, is confined to a few misty, floating ideas about Charlemagne, the Crusades, and Rienzi. This is partly owing to the study of history in schools being confined, in many cases, to the beaten round of Britain, Greece and Rome; and partly to the fact that most outlines of General History take but a slight hold of the mind. When we whose minds are ripe and strong consider how little of Gibbon or Macaulay we can remember beyond their very brilliant passages, we shall at once see the folly of expecting young and tender memories to retain more than the great events of history. What these great events are they need to be told, or else their after-reading will be confused and wearisome." The book is also meant to serve as a guide and preparation for the reading of special and more detailed histories. While the narrative is continuous, each chapter is headed by its Central Point of interest, upon which the memory may easily rest and around which minor events may group themselves. This plan of teaching history by central points is worthy the attention of teachers who have not yet adopted it in their class work. As a Reader, this differs from anything else we have seen, and there is room for more of its kind.

FELTER'S NEW INTERMEDIATE ARITHMETIC. *Containing Oral and Written Problems, and Drill and Card Exercises. S. A. Felter and S. A. Farrand. Pp. 258. New York: Scribner, Armstrong & Co.*

FELTER'S ADVANCED ARITHMETIC. *Containing Oral and Written Problems, and Drill Card Exercises. By S. A. Felter and S. A. Farrand. Pp. 249. New York: Scribner, Armstrong & Co.*

These are the second and third books in the "Natural Series" of Arithmetics. In the Intermediate, drill card exercises are a prominent feature, so arranged as to afford any desired amount of practice in computation, to render the pupil quick, accurate, and intelligent in his arithmetical work. Written and oral work are combined throughout the book. The Advanced Arithmetic continues the subject from where the Intermediate leaves it. The inductive and analytic methods of investigation are adhered to in both books, and the problems are designed to represent actual business transactions. The books are issued in substantial shape, and are not too large.

HIGHER LESSONS IN ENGLISH. *A Work on English Grammar and Composition. Course of Practical Lessons Carefully Graded. By Alonzo Reed and Brainerd Kellogg. Pp.: 264. Small quarto. New York: Clark & Maynard.*

In proof that the value of Grammar for the sacred ends of parsing and memorizing is more and more questioned, we need but direct attention to the number of new books aimed at a more practical teaching and study of the subject. The little book under notice would make the science of language subordinate to the art of expression; and, in furtherance of this design, prominence is given to the making of sentences and to contracting, amplifying, punctuating and criticising them. The book is a practical one. It is designed to follow Graded Lessons in English, a more elementary text-book by the same authors and upon the same general plan.

THE CENTENNIAL SCHOOL SINGER. *Containing Songs of Patriotism and Peace. By Geo. H. Curtis and Wm. O. Bourne. Pp.: 128. New York: Biglow & Main. 1876.*

The Centennial School Singer is designed for the use of American children, and is, for the most part, a selection from songs and hymns which express the patriotic sentiment of the race. There are some standard home favorites and some original contributions found here, which, together with the national hymns of other lands, make a good special collection to supplement a work of wider range.

MUSIC AND WORDS.—As emotion exists independently of thought, so also does music. But music may be appropriately wedded to thought. It is a mistake to suppose that the music always gains by being associated with words, or definite ideas of any sort. The words often gain a good deal, but the music is just as good without them. I do not mean to deny that images and thoughts are capable of exciting the deepest emotions, but they are inadequate to express the emotions they excite. Music is more adequate, and hence will often seize an emotion that may have been excited by an image, and partially expressed by words, will deepen its expression and, by so doing, will excite still deeper emotion. To set words to music in oratorio or opera, or any kind of song, is, in fact, to mix two arts together. Poetry is a great art; so is music; but as a medium for emotion, each is greater alone than in company, although various good ends are obtained by linkng the two together, providing that the words are kept in subordination to the greater expression-medium of music. Words, situations, and ideas, are very useful to the composer, and still more so to his audience; for a story, or the bare suggestion of some situation, provides a good skeleton form, and serves to awaken trains of emotion which music is all powerful to deepen; and while the words are being declaimed the music has already passed into depths of feeling beyond the control of words. Let any one look at the four parts of a chorus, and see the kind of subordinate use made of the words.

ALWAYS SPEAK THE TRUTH.

C. MATZ *arr.*

1. Be the mat - ter what it may, Always speak the truth; Wheth - er work or whether play, Always speak the truth. Nev - er from this rule depart, Grave it deeply in a lie, Always speak the truth. He is but a coward slave Who, a present to be won, Always speak the truth. He who speaks with lying tongue, Adds to wrong a

[illegible]

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THE ASSOCIATIONS—STATE AND NATIONAL.

TWO August weeks were spent in attendance at the State Teachers' Association, which met at Erie, and the National Teachers' Association, which met at Louisville, Kentucky. The full proceedings of the former appear in the present number of *The Journal;* a sketch of the latter will be published in our next number. What we have to say here will take the form of a personal narrative.

ERIE.

In company with the genial superintendent of the county of Berks, we left Harrisburg on Monday afternoon, August 13th. The night was spent at Williamsport, whence a long ride over the Philadelphia and Erie Railroad, greatly shortened by the pleasant intercourse with teachers and friends who joined our party on the way, brought us to Erie in time for the evening session of the Association. This session was mainly occupied by Dr. S. P. May, of Ontario, in discussing the subject of Pedagogical Museums. His address was of a very practical character, showing how such museums should be organized, and their great value to an educational system. Wednesday and Thursday were busy days with the Association and with us. The work of the Association appears in the reports, but the unseen work of a general school officer at one of these meetings cannot be placed on paper. He is plied with a continual round of questions, to answer which taxes most severely both his time and energy. Seclusion alone can bring him rest.

The Association at Erie was not largely attended. The disturbances along the railroads doubtless prevented the getting up of excursions, and perhaps caused individuals heretofore almost constant in their attendance to remain at home. The West was scarcely better represented than the East. Pittsburgh did little more to swell the list of members than Philadelphia. Still, it was a body fairly representing the various parts and the multiplied school interests of the state. Teachers were on hand representing all grades of schools, and there was a fair sprinkling of superintendents, college, academy, and normal school men.

The system adopted at West Chester of electing delegates from the several counties was not fairly tested at this meeting. No prominence was given to the matter. The good that is in it was not brought out, and we hope every county will repeat the experiment next year at Reading.

The programme of exercises arranged by the Executive Committee was a good one, and it was carried out with but a single break—Mrs. Rickoff, of Cleveland, Ohio, who was to have read a paper, telegraphed at the last moment that she could not be present. Fortunately her place was easily filled; but nothing but the gravest reasons can justify a disappointment of this kind. We desire to add that no paper should ever

be read before the Association whose author is not present, or has not the strongest kind of a reason for being absent. A man who merely sends his paper and remains at home, or goes elsewhere, tacitly assumes a superiority over other members that, when understood, must prove offensive. The plain English of it is that he thinks he can instruct others, but he has nothing to learn himself. He may take up their time, but they have nothing to present for which he can afford to sacrifice his.

The programme allowed ample time for discussion, which was right; but for some reason the Association never got down to real hard work, and seemed to have no disposition to grapple in earnest with any of the more difficult problems that now demand solution at the hands of educators. The idea of having "a good time," of making and enjoying fun, was, both in session and out, uppermost in its mind. And perhaps, after all, this is the best feature of one of these Associations. One meets old friends, talks over old times, acquaints himself with new people and new ways, tells stories, cracks jokes, enjoys his holiday, and goes back to his school with little additional knowledge perhaps, but with renewed health and a freshened spirit.

Superintendent Jones, of Erie, most assiduously looked after the comfort of his guests, and the School Board richly deserved the thanks they received for kindnesses shown the members of the Association. The exhibition of scholars' work prepared by all the scholars in the public schools and conveniently displayed for examination, was worth a trip all the way to Erie to see. There are few cities in the State that can equal it. We hope Reading will make the effort next summer. The excursion on the bay on Thursday afternoon was greatly enjoyed by all who participated in it—except the few who were unfortunate enough to be placed in a position to be laughed at! Besides the regular excursion, there were many who took a sail in small parties on the lake; and some of these became so enthusiastic in their praises of the place and its delights, that they expressed themselves in favor of meeting at Erie every year.

On the whole, while the Erie meeting was by no means one of the largest or the most fruitful meetings of the Association, it was one that will linger long in the memory as associated with old and new friends, a delightful city, a hospitable people, and a series of unalloyed social pleasures.

LOUISVILLE.

Good-bye to Erie at eleven o'clock on Friday morning, by the Lake Shore route to Cleveland, and across Ohio to Cincinnati, where we arrived late at night. Our quarters at the Grand Hotel were exceedingly pleasant, and we enjoyed the luxury of being *unknown* so much that we were tempted to remain for days, seeking quiet and rest. We had time, however, for only a good look at the Queen City, and were off down the Ohio on the boat for Louisville. Some beautiful scenery is passed on the way, and for many hours and far into the night, we kept our seat on the deck. Boat-riding to us is in the summer time greatly preferable to car-riding; and, although this was not our first trip down the Ohio, we enjoyed it exceedingly. We reached Louisville on Sunday, at 10 a. m.

We spent Monday in preparing some business for the Association and in sight-seeing in Louisville. Louisville is a fine, prosperous city of 140,000 inhabitants. We had seen it just after the war—it is hard to realize now that it is the same city. The cemetery is particularly interesting to the visitor. There are few finer ones in the country. The Kentucky State Teachers' Association held meetings Monday afternoon and evening. We were present at the evening meeting, and upon invitation, explained the school system of Pennsylvania. Much interest was manifested in the subject, and multitudes of questions were asked both during the meeting and during all the remainder of our stay in Kentucky. One fact is clear: Kentucky is making progress in educational affairs, and is destined to become a great common school state.

The Board of Directors of the National Association met on Monday evening, and the Association itself next day at 10 a. m. The meetings were not as largely attended either by members or citizens as upon some other occasions; but it was a representative body, composed of many of the strongest and most earnest school men in the nation. Some twenty-five States and Territories were represented. But two or three members were present from the New England States, and the Middle States sent only a few more. Prof. Adney, of Washington and Jefferson College, and the writer, were all that answered to the roll from the Keystone State. The principal attendance was from the South and West. Of the Southern States, Missouri, Kentucky, Tennessee, Vir-

ginia, West Virginia, North Carolina, Mississippi, Arkansas and Texas, were represented by some of the ablest men in the Association. After much intercourse with these gentlemen, we cannot but think that the wounds of the nation are being healed, and that a union is about to be formed that will bring all sections of the country into closer and more fraternal relations than have heretofore ever existed. The leading men of the South seem to be anxious to learn the doctrine of free schools, that they may secure in the best possible way the fruit of universal education, which all have come to see is the only salvation for the republic.

The programme of exercises, both in the General Association and in the several Departments which met separately, was very rich and full; so much so, indeed, as to make it faulty. The reading of the papers occupied nearly the whole time of the Association, and little was left for discussion. So far as the General Association was concerned, there was not a single strong debate on any question, and the same is true to a great extent of the Departments. A special session was appointed for the discussion of the question of the "Relations of Education and Labor," a question, at this time, full of interest, but a long paper read out of place so shortened the time that there was no force or warmth in the brief debate that followed.

The papers read were, many of them, much too long. Their authors were also mistaken in the kind of matter wanted by such an Association. They traveled over old, beaten ground, just as if nothing had been done in all the years that are past, just as if nothing could now be taken for granted as known. The teachers assembled at Louisville are well versed in professional literature; what they want is new facts, fresh discoveries, the results of deeper investigations. Formal lectures, addresses, are not what such an occasion requires; but short, pointed statements of facts, laws, theories, supposed to be unknown.

But even with these drawbacks, the meeting was on the whole a successful one socially, intellectually, and professionally. The headquarters of the Association were at the Galt House; and here in its spacious parlors more good was probably done for the cause of education by private conferences among the members of the Association than by the public meetings in Liederkranz Hall. Among the papers read, too, will be found several of rare value; and here and there in the discussion a new idea was struck out that will grow and produce fruit in due time.

The Association adjourned on Thursday evening. A day spent in Mammoth Cave, and another at Ashland, late the home of Henry Clay and now the seat of Kentucky University, concluded our stay in Kentucky. A rapid run from Lexington to Lancaster brought us home in time for work Monday, August 20th.

THE STATE ASSOCIATION.*

THE Twenty-fourth Annual Session of the State Teachers' Association of Pennsylvania assembled in the court-house at Erie, on Tuesday morning, August 7th, 1877, and was called to order by the President, Prof. George L. Maris.

Rev. J. C Wilson, of the Presbyterian Church, read from the Scriptures (Job xxviii.), and offered prayer.

Supt. H. S. Jones, of Erie, then delivered the following

ADDRESS OF WELCOME.

Mr. President and Fellow-Members of the Teachers' Association of the Commonwealth of Pennsylvania: Speaking for this section of the State, and especially for this city, the chosen place for your twenty-fourth annual session, it affords me profound pleasure to pronounce words of welcome on this occasion.

An organization of educators that has lived an active and influential life for nearly a quarter of a century, can but be welcome to any intelligent community within the borders of our country. It is not difficult to show that the labors of the Association are intimately connected with the educational progress of the State; that it has been a power in arousing and enlightening public sentiment and in developing a common-school system that suffers nothing by comparison with any other, and according to the united judgment of many leading minds, stands without a peer—a model worthy of study and close imitation.

You are welcomed, not as a band of "paper philosophers" who do their work of reform by reading disparaging essays and the passing of abortive resolutions; but you come as earnest, devoted, practical workers in the cause, who know right well the amount of patience, foresight, energy, perseverance and faith essential to successful results.

Neither do you come as a special class, for you represent the whole school machinery of our noble State. The programme you offer us happily comprehends the salient features of our educational system. It introduces Lafayette College, which, through liberal bequests and wise management, has, in the words of Donald G. Mitchell, "made a dash into the front rank of our colleges." Washington, justly proud of its long list of graduates who have become distinguished in public life; Franklin and Marshall, noted

*Proceedings reported by J. D. Pyott, Lancaster, Pa.

for its strict curriculum and thorough, critical scholarship; the common, the higher, the normal schools, and the superintendency are represented; and, besides, the whole is sharpened and strengthened by help from a State distinguished for its fine schools and the professional spirit of its teachers, and England's fair daughter of the West, our sister across the blue lake, presents a valuable contribution to the order of exercises.

It was hoped that, when the Association should meet here, the venerable Dr. Burrowes, "the father of the school system of Pennsylvania," the cultured Professor Wyers, and others of sweet memory—gone to their rest—would be with us, lending grace and wisdom to our deliberations.

These are days of serious import; enthusiasm is chilled, faith disturbed, and expectation uncertain. Perhaps at no previous gathering of this Association has there been a greater demand upon it for wise action and true insight in its deliberations. The seeming lack of a well-qualified directive force in the management of our great business enterprises is evidence that the educational training of the present generation is in certain essentials positively defective.

This part of our Commonwealth, which you have seen fit to honor at this time by your presence, though not claiming a leading position for educational enterprise, has a record of which the friends of education need not be ashamed. Near us is Allegheny College, surely and rapidly becoming a first-class institution; the State Normal School at Edinboro is large, thrifty and radically progressive; the North East Seminary is a school of bright prospects; the venerable Waterford Academy has a history rich in good results. The high, grammar and primary schools of Titusville, Corry, Meadville, Warren, Union, Girard, North East and other places, are worthy of commendation. The rural schools are in good condition; Mill Creek, a township that joins this city, has held high rank for liberal and efficient management.

As to Erie, the child of six, in the public schools, has before him a direct line of advancement extending from the primary department to the leading universities. Our deaf. mutes have a special school in which they are taught to speak and understand spoken language. Evening schools afford instruction in industrial drawing and the elements of an education. Our city is well represented in the higher institutions of learning, in graduates and students; nearly all having been sent from the Erie Academy and the public High School. But few towns are better supplied with good school buildings, the School Board having erected six during the last six years.

If time would permit, I might speak of the historic interest of this locality, or its peculiar geological formation; of the beauties of our bay, which is said to rival that of Naples in loveliness; of the peninsula, with its crystal ponds and inlets and remarkable flora, and of the characteristics and varied industries and institutions of our people.

In conclusion, Mr. President and friends, words of welcome are most acceptable when brief. You are welcome to the sweet influence of our clear, invigorating lake breezes, to acquaintance and friendly intercourse with our good people; and it is hoped that this meeting of educators will not only prove of great benefit to the state at large, but a permanent blessing to the "Lake City" of our grand old Commonwealth.

Supt. R. K. Buehrle, Chairman of Executive Committee, replied to this address.

RESPONSE.

Supt. Jones and Members of the Erie Committee: Your cordial words of greeting cannot but reassure the teachers of Pennsylvania of the welcome that awaits them on the part of the teachers and citizens of Erie. Assembled from all parts of the great Keystone State, we have come to lay at your feet the trophies that may be won in the intellectual contests that shall be fought here. The fame of your excellent schools has reached us in our distant homes, and hence we have come to learn of you; and yet we are not ashamed to own that we believe we may also benefit you, for all history shows that intellectual, no less than physical, light travels from East to West.

We have come to join our tapers to yours, that the light for each and for all may be increased. We believe in the utility of educational conferences, especially at such a time as the present. It behooves the friends of popular education, and especially of our public school system, to look well to their defences, for insidious attacks are not wanting. Its enemies are not asleep, and we must be vigilant, lest they obtain the advantage. Hence at this, the first meeting of the Association in the second century of our country's liberty and independence, we have come to discuss in your midst, in this beautiful, flourishing city, emblematic of our flourishing Commonwealth, the issues that must be met in building on the foundation already laid. We have recently passed through an era of school-house building, and Normal School organization, and the foundations of a thorough system of public instruction for all the children of the Commonwealth were firmly laid in the Constitution of 1873; now we address ourselves to the teacher's professional life, in calling attention to his personal culture, his tenure of office and professional associations. In this department your city has been highly favored, for we shall have in our midst a gentleman representing the mother country, and inviting us to a rare treat, in an address on a pedagogical museum.

But realizing as never before that our State educational fabric is neither complete nor symmetrical, if we disregard the claims of higher education, we have determined to re-examine and properly adjust the relation of the State to higher education, and of colleges to common schools. Nor have our personal comforts and necessities been overlooked, for we shall have in our midst one of the most gifted ladies of a neighboring State, who will cause us to revel in the pleasures of the "imagination." All this only proves how fortunate for the Association it was that the city of Erie extended a loud call to us at West Chester to meet here. The Association meets here to-day in a somewhat different capacity from what it was heretofore. It has assumed a representative form. It is no longer a mere gathering, but an organized representative body, including delegates from the different county institutes.

May we not hope that the work of this meeting may be even better than that of former meetings, so that the teachers and citizens of Erie may have as little cause to regret our meeting in their midst as we have that we have gone West.

REPORTS FROM COMMITTEES.

Reports from committees being in order, that of the Committee on Normal Schools was called for, when Mr. Buehrle reported

that the committee had met and published the result of their deliberations in *The School Journal*, according to instructions. That report is before the teachers of the State, and the duty of the Committee is done.

On motion of Dr. Geo. P. Hays, of Washington and Jefferson College, the published report of the Committee was referred to the Executive Committee, with instructions to bring the subject before the Association at some convenient time during this session.

The Committee on Salaries of Secretary and Ticket Agent reported progress, and asked to be continued until the arrival of absent members, which was agreed to.

The Committee on Local Supervision were notified that they would be expected to report to-morrow.

AMENDMENTS TO CONSTITUTION.

Prof. A. N. Raub, of Lock Haven, gave notice that he would propose the following amendment to Article VIII. of the Constitution:

Insert after the words "Executive Committee," the following: "of whom the person receiving the highest number of votes at the annual election for members of said committee shall be chairman."

Prof. I. S. Geist, of Marietta, gave notice that he would offer the following amendments to the Constitution and By-Laws:

Strike out of Article III. of the Constitution the words "a Ticket Agent;" strike out Article VII. entirely; and in Section 3 of the By-Laws strike out the words, "and the Ticket Agent $50."

Supt. A. D. Glenn, of Armstrong, gave notice that he would offer the following amendment to Art. XI. of the Constitution:

Strike out the word "second" before "Tuesday in August," and insert "first."

DELEGATES IN ATTENDANCE.

The roll of counties was called to ascertain how many delegates had been elected, under the resolution adopted at last session, to represent county institutes. The following counties responded: Butler, Chester, Delaware, Lancaster, Lehigh, Mercer, and Washington. Additional delegates were afterwards reported to the enrolling officers, all of whom will be found in the list of members, designated by an asterisk (*) after their names.

None of the delegates reported any instructions from their constituencies in regard to business to be brought before the Association.

ERIE SCHOOLS.

Supt. Jones invited the members of the body to visit the school buildings of the city, and stated that in the High School the work of pupils for the last term was on exhibition.

ENROLLMENT.

The President announced that enrollment of members was now in order, any one present being entitled to a certificate of membership upon paying a fee of $1.00. But three members of the Enrolling Committee being present (A. B. Dunning, jr., I. S. Geist, and Miss Carrie E. Bemus), the vacancies were filled by the appointment of Mr. James Burns and Miss A. C. Kilbourne, after which they proceeded to business, which occupied the remainder of the morning session.

TUESDAY AFTERNOON.

THE Association was called to order at two o'clock, and opened with music—a boating song, by a chorus under the leadership of Prof. S. K. White.

President Maris read his Inaugural Address on "A Thorough and Efficient System of Public Schools."

INAUGURAL ADDRESS.

GEO. L. MARIS.

THAT every child is entitled to instruction at the public expense, is a principle so well established that it is no longer seriously questioned. But to what extent public instruction should be carried appears to be an unsettled problem.

Though there would seem to be no need of argument to show the necessity of public support to a *thorough and efficient system of public schools* in a Republic, the opposition to the higher grades of such a system comes from so respectable a source as to require attention.

THE STATE AND EDUCATED MEN.

The first proposition demanding consideration is, Does the State derive no benefit from college and university culture, equivalent to the expense attending the support of such institutions?

That the State has need of men of ripe scholarship, no one will deny; but to what extent she has availed herself of the talent of her most cultured sons, many are not informed. I have spent some time, with the best means at my command, to ascertain what is the true relation of education to national prosperity, and the following is presented as a very close approximation to the truth: Of the fifty-six (56) signers of the Declaration of Independence, thirty (30) were college graduates, and only fifteen were not liberally educated; there were thirty-nine (39) framers of the Constitution of the United States; of these, seventeen (17) were college men, and only two *self-educated;* of the Senate of the First Congress, fifteen (15) were college-bred, and eleven (11) received a less liberal education; sixteen (16) different men have been elected President of the U. S.; of these, eleven (11) received the equivalent of a college education, and

only *two* are reported as not liberally educated; of the several Chief Justices of the United States, six were college men; of the Speakers of the National House of Representatives, nineteen (19) received a full college education, and eleven (11) only an academic course; we have had twenty-eight (28) Secretaries of State; of these, twenty-three (23) were college-educated, and only five were not; twenty-five (25) of the thirty-four (34) Attorneys-General were college graduates; out of thirty (30) Secretaries of the Treasury, twenty-five (25) received a college education; we have sent sixteen (16) different men Ministers to England, of these fifteen (15) were college graduates; of our twenty-six (26) Ministers to France, all but two had been thoroughly educated. Thirteen (13) Senators of the last Congress were known by their compeers as the most influential men of that body; of these, *eight* are regular college graduates, and only *one* is reported as having received only a limited education; in the House of Representatives of the same Congress there were twenty-nine (29) regarded as leading members; of these, twenty (20) had received a full college course, and of the remainder, all but two had received a liberal academic education. It will thus be seen that the nation has need of well-trained scholars in all departments of government.

Wherever there is need of strong men, wherever great intellectual effort is demanded, the nation turns to her little band of trained men and appeals to them for help.

No one will deny that well-educated men are a necessity in all departments of science, literature, art and government, and it is a cause of no little wonder that no systematic national effort is made to supply this want. The inquiry naturally arises, Why is it that the cause of higher culture is so neglected by the Government and left to private enterprise? Is it true that institutions of higher learning are in such demand that they are a source of pecuniary advantage to those who invest their money in founding them? Is higher culture likely to be better provided for from private sources than by public endowment? Is there a point to which public education may be carried, and beyond which it is neither safe nor politic to elevate our public schools?

The advocates of the Public School System as it is, base the justice of public support for elementary schools upon the ground of the necessity of a degree of general education for the safety and protection of the State; that it is taking a part of the property to support schools so that the residue may be more secure and of more value than the whole would be were no such provision for schools made; and at the same time they claim that it is unjust to support High Schools and Colleges at the public expense, because, they say, the same arguments do not hold in favor of the latter that are valid in the case of the former: but *why* the arguments are valid in the one case and not in the other, the opponents of the High Schools have by no means made clear. It cannot be maintained that property can justly be taxed only when there is a direct return to the property holder, for in that case the whole system of taxation falls to the ground. If this theory of taxation is correct, all appropriations for charitable institutions must cease; the sick and maimed must build their own hospitals, the deaf and dumb their own asylums. Admit that people can justly be taxed only when a direct return is made, and you overthrow the very foundation of all government, and the source of all social improvement.

I have yet to meet the first valid argument to show that taxation to maintain higher schools and colleges does not rest upon the same secure basis as taxation for elementary schools. The question is not one of the right of taxation, but the expediency of it. If it be shown that higher education can better be promoted by the voluntary system than by public direction and support; if the prosperity of the nation is more safely and surely maintained byprivate than by public education, the dispute is ended and argument should cease. But if, on the other hand, it can be proven that a complete system of public schools will produce better and surer results, such a system should at once be inaugurated.

HISTORY OF HIGHER EDUCATION.

From the earliest days of the Colonies until after the commencement of the present century, no discrimination was made against higher education by the Colonial Assemblies, but, on the contrary, one of the earliest acts of the General Court of Massachusetts was to vote a liberal sum for the establishment of a college; and President Quincy declares that during the first seventy years of the existence of Harvard University, "its officers were dependent for their daily bread upon the bounty of the General Court;" and during the whole of the colonial period, and for many years after the adoption of the State Constitution, regular and considerable aid was given by the State for the maintenance of Harvard University, and a complete system of public preparatory schools.

In respect to fostering schools of a higher grade, the history of nearly all the colonies is substantially the same. Our ancestors never thought of neglecting higher schools; the theory that elementary schools alone are worthy of public support is a new doctrine that has sprung into existence since the beginning of the present century.

The plan elaborated by Thomas Jefferson was the most complete of all those attempted in the several colonies, since it recognized all the steps of a full course of study as belonging to a system of public instruction, from the most elementary school to the highest university course; but the system so admirably planned failed of success on account of local jealousy and religious intolerance.

William Penn affirmed: "That which makes a good constitution must keep it, viz: men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by the virtuous education of youth, for which spare no cost; for by such parsimony all that is saved is lost."

Washington, in his farewell address, said: "Promote, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened." Adams, Franklin and Hamilton were equally enthusiastic in their support of higher education, and so completely were the founders of the Republic imbued with the necessity of education, that in the ordinance of 1787, in relation to the territory belonging to the United States, the important clause was inserted that "Schools and the means of education shall be forever encouraged."

I will cite also the Constitution of Pennsylvania, adopted in 1776, to show the attitude of our ancestors upon this subject. "A school or schools shall be established in each county by the legislature, for the convenient instruction of youth, with such salaries to the masters paid by the public as may enable them

to instruct youth at low prices; and all useful knowledge shall be duly encouraged and promoted in one or more universities." This clause remained substantially the same for almost 100 years, and in the Constitution of 1873 a broader and more comprehensive article takes its place: "The General Assembly shall provide for the maintenance and support of a thorough and efficient system of public schools, wherein all the children of this Commonwealth above the age of six years may be educated."

From what has been said, it is clear that both history and justice are on the side of public support to higher institutions of learning, and the only question remaining is the expediency of such a system. Can the State inaugurate and enforce a better system of education than private enterprise?

To solve this problem, we must call in the experience of other States and other nations that have had a larger experience than we. Prussia and France in the old country will furnish the material we need to make our comparison, and Massachusetts and Michigan will throw light upon the development of a rational system in America. During the last years of the eighteenth century, and the early years of the present, France was the ruling country of Europe, and Prussia was one of the inferior powers; to-day, after a lapse of two generations, Prussia is the foremost country of Europe. Only a few years ago, when war was imminent between Prussia and France, every one wondered at the audacity of the little German State in attempting to grapple with such a power as France; but, after a few months of active operations, had shown that her self-confidence was well grounded, how we all wondered at the result! Many theories were propounded to explain the unexpected issue of the war. Now, however, the cause is patent to all. France depended upon the boasted *voluntary* system for the education of her children, while Prussia had elaborated and enforced the best system of public schools the world has yet seen!

France had been great in the past because she had been the country of the greatest scientific men of the last century, but, content with her present acquirements, she was making no advancement; while Prussia, chagrined at her defeat in the wars of the last century, had discerned what no other power seemed to understand, that supremacy in war or peace depends upon the general intelligence of her people, and the possession of the highest culture by her statesmen—a lesson unconsciously taught her by the France of the last century.

It was not until the year 1808 that Wilhelm Von Humboldt assumed the control of the schools, actuated by the thought so well expressed by himself: "The thing is *not* to let the schools and universities go on in a drowsy and impotent routine; the thing is to raise the culture of the nation ever higher and higher by their means."

Under his inspiring hand the German schools sprang, as if by magic, to the front rank, a position they maintain, without a rival, at the present day. The Germans are proud of their schools, and well they may be, for the very name of Germany has become a synonym for the highest learning throughout the civilized world. They alone seem thoroughly to understand what Matthew Arnold affirms: "A public system of schools is indispensable in modern communities. From the moment you seriously desire to have your schools efficient, the question between public and private schools is settled." * * * "We must not hope to improve, effectually, the secondary school without doing something for the school above it, with which it has an intimate natural connection." * * * "The intervention of the State becomes especially necessary in superior instruction, because here the body of public opinion, educated enough to discern what is wanted, gets smaller than ever, while the importance of organizing your instruction well, and committing it to first-rate men, becomes greater than ever."

All departments of education in Prussia are under the control of the Government. Her schools are all *public schools*, from the lowest elementary grades to the highest university course. In America, the best system of schools is to be found in Michigan and Massachusetts. In the former State the ideas advanced in the colonial days of the latter, have been most fully developed. While Massachusetts has a good system of elementary and secondary schools, she has failed to carry out her system to its logical end—a regular gradation from the primary classes to a complete university course. Had she continued her system so well begun two hundred years ago, and made Harvard University the culminating point of a grand organization extending over the entire State, so that the whole were governed by the University as a head, she would to-day deserve the proud distinction of rivaling the best German University, and even now, it is not too late to avail herself of the advantage she already possesses. It has been left, however, to a State that was not admitted into the Union until after Harvard had celebrated her two-hundredth anniversary, to be the first to carry into effect a complete system of schools, with each grade looking to the one above, and deriving from it inspiration to increased effort. Though the University of Michigan has been in existence but a little over a third of a century, it takes rank among the foremost in the land, and by its influence upon the Union schools throughout the State, it has elevated them in all their grades, until now the new State of Michigan can justly boast of a system of schools unequaled in the United States.

It seems to me an utter impossibility to maintain an efficient system of public schools as we now have them in Pennsylvania, without making them a part of a complete system. Education does not develop from below upward, but in all age sthe impetus to culture has come from above and acted upon the less cultured mass beneath The history of the past fifteen years has satisfied me that the growth of the public schools has well-nigh reached its climax, if their province is merely to teach the elements. These schools can produce their best fruit only when the stimulus of a higher course, with which they are connected, is brought prominently to bear upon them.

As has been well said: "When we attempt to divorce advanced from preliminary education, we are simply persisting in cutting the whole mass of branches and boughs and blossoms of education from the trunk; and when we succeed in rearing goodly trees by persistently sawing off all their upper growth, and leaving the bare trunk, then, and not till then, can we have goodly systems of primary and secondary public schools, while we cut off from them the whole development of higher education."

Thaddeus Stevens, in his celebrated appeal in favor of public support for higher schools, uses these important words: "The degree of civilization and intellectual cultivation of every nation on earth, may be ascertained and accurately estimated by the amount of encouragement which they give, not by individual contributions, for these only show private liberality,

but by *permanent laws* to common schools and common education, and to the higher branches of knowledge. Nor does it seem possible to separate the higher from the lower branches of education, without injuring, if not paralyzing the prosperity of both. They are mutually dependent and necessary to each other's existence and prosperity, as are the ocean and the streams by which it is supplied."

President White, of Cornell, in a recent letter from Italy, says: "The more I travel through these ancient lands, and take a view of our American affairs from the outside, in the light thus obtained, the more thorough becomes my conviction that our main bulwark against the terrible evils that have swept over other lands, must be found in a thorough system of education, complete in all its parts, managed by the people, and not in the hands of any sect or party. I say complete in all its parts, because I am convinced that high school instruction must form a part of such a system in order that public schools in general may be kept in proper efficiency."

The celebrated Prof. Helmholtz, of Berlin, to the same effect, declares that "every nation is interested in the progress of knowledge on the simple ground of self-preservation, even were there no higher wants of an ideal character to be satisfied. No nation which would be independent and influential can afford to be left behind in the race,—nor has this escaped the notice of the cultivated people of Europe. Never before was so large a part of the public resources devoted to universities, schools, and scientific institutions."

In Prussia in the Old World, and Massachusetts and Michigan in the New, the schools are practically under public control, and in these States we find the best development of schools. Hence, it seems to me the conclusion is inevitable that the State is the only power capable of making a complete development of the educational forces; hence, to the State should be entrusted the difficult task of educating the children, because she, and she alone, can do it well. Look where we will, we find the greatest prosperity where there is the highest educational development, and the best educated people are to be found in the States in which education is free, or practically so, by State enactment.

The only plausible objection to such a complete system of education in Pennsylvania is the expense; and as long as the school-tax upon property is not so great as to prevent the acquisition of it, there is no limit to the right or expediency of such taxation. From my acquaintance with a large part of the people of our noble Commonwealth, I am free to say that there is the least complaint of the burden of the school-tax where the money is wisely spent in supporting good schools. The opponents to elevating the standard of public schools should remember that those who pay a large portion of the school-tax—in many cases the greater part of it—receive but little direct return, because the standard is not high enough to meet their wants, and they are obliged to pay heavy term bills at private schools, in addition to their contribution to the support of public schools.

A complete system of schools, such as I have indicated, embracing the whole course of study from the Primary school to the University, would increase, to some extent, the *public* expenditure, but it would lessen, very materially, the amount spent privately, and by better adapting means to ends, and by having only such schools as are needed, and not duplicating the number actually demanded, as we do under our system of elementary public schools supplemented by academies and seminaries, the aggregate saving would be very considerable. It is safe to say that about two-thirds of our present expenditure, public and private, would furnish better schools. And instead of alienating from the system all wishing to obtain a good education, as we now do by our low standard, if we should make the public schools the best obtainable in each community, the interest of all classes, the rich and the poor, would be concentrated upon one grand system.

The schools which, from the necesssity of the case, must be the only means of education at the command of the majority of our people, should be made good enough for all, so that our wealthy citizens could find no better schools than those in which the children of the poor are educated. I say this in no spirit of a demagogue, but actuated by the single motive of the elevation of all classes of our people. I affirm boldly, that the only sure way to maintain the integrity of our free institutions, is to make the *best schools* free to all—free as the air we breathe. The poorest child in the Commonwealth has as good a *right* to a complete education as the richest,—the accident of birth must not be forever branded upon the poor; a Republic cannot afford to foster a system of schools in which the rich alone can have the advantages of a good education. I speak as one who has had the experience to know whereof he affirms, when I say that it is difficult enough for a poor boy to obtain an education under the most favorable circumstances, without having any term bills to pay.

Michigan fills an important place among the younger States of our sisterhood of Republics, but there is no brighter gem in her coronet than the broad liberality she displays toward her sons of toil. In Michigan, as in no other State in the Union, is the free school system carried out in its fulness; her public schools are open to all her children, and in the greatness of her soul she opens the doors of her noble University to students from all parts of the Union, regardless of sex, color or condition. Oh! Pennsylvania, would that thy legislators could take a lesson from the Lake State; would that they could be made to understand that the true province of the State is to elevate and ennoble her children, and that the best legacy she can give is a well educated, well disciplined mind!

Every year we spend upon our prisons, our almshouses and other charitable institutions, over $3,000,000; all this does Pennsylvania give freely without a murmur: every year she expends upon her asylums for the deaf, and dumb, and blind, hundreds of thousands of dollars; and for the education of her soldiers' orphans she has given millions within a very few years. Upon her elementary common schools she expends millions; but for the education of those who would do her the best service, those from whom she might derive her greatest honor, for her young men and young women ambitious of a higher education, she makes no provision. Following the example of the National Government, she fosters her material resources, no State in the Union being more jealous of her temporal interests. As our National Government spends millions upon her rivers and harbors, her post-offices and custom-houses, her armies and navies, and almost wholly neglects the education of the people, so does Pennsylvania provide lavishly for the maintenance of all her interests but the one she should have most truly at heart, the highest possible development of the intellects of her children. She provides everything but

that which would best promote her highest welfare; but, judging from her past progress in educational development, I am encouraged to hope that the day is not far distant when, by the liberal provision of her Legislature, supplemented by the bounty of her citizens, such a system of schools shall be established within her borders as will attract the admiration of the world. May her liberality be such, that none but able men and women shall occupy the positions in her high schools, and the best talent of both Europe and America be induced to accept the chairs in her Universitiy.

The discussion of the paper was postponed for the present.

Music—"Nearer Home."

Dr. Thos. G. Apple, President of Franklin and Marshall College, Lancaster, Pa., read a paper on "The Relation of Colleges to Common Schools."

RELATION OF COLLEGES TO COMMON SCHOOLS.

THOMAS G. APPLE, D. D.

EDUCATION in its rudimentary stages and in its higher forms constitutes one general process, in which the different stages are held together in organic union. This must be so, because truth is a concrete unity, and as all the branches of education have truth in some form for their study, it is plain that they must stand in necessary organic relation to each other. So also, the human mind is a unity, and therefore its education and culture must be one organic process from beginning to end. What is true of a particular science, as for instance Mathematics or Language, that each part finds its true significance only in its relation to all the parts and to the whole, is equally true of the whole circle of studies that enter into the idea of a complete education.

In this organic process the higher determines and moulds the character of the lower, and not *vice versa*. The end of education, considered either in its moral or merely intellectual aspects, rules as a plastic power in the elementary forms from the very beginning. No one can properly lay the foundation of a bulding unless he knows the character of the superstructure that is to be erected upon it. The seed always carries in itself the complete type of the plant that is to grow up from it. This proposition is coming to be more and more acknowledged in the growing importance that attaches to primary education. Not only is it considered necessary that good teachers should be engaged in the primary schools, but the attention of the best educators is directed to the discussion of the fundamental principles that enter into all primary education.

It belongs to the province of higher education to make such fundamental principles the subject of attention in the form of *philosophic* study. This indeed is the meaning of philosophy in the proper sense, as distinguished from mere science. Philosophy is the knowledge of knowledge, the science of sciences. Higher education is distinguished from the lower, therefore, not merely in that it comprehends a more extended course of study, but especially in that it comes to a relative completion in the study of those general principles of all knowledge which in the end must mould and determine all education in its lower forms. It matters not for the point we are considering whether this philosophy is sound or unsound. The point in the argument is that it carries in it this moulding power. Whether we are conscious of it or not, it is the philosophy, or system of general and universal principles that prevails, that determines the spirit of our education in all its stages, and it is the province more especially of college education to develop and unfold philosophy. A college that has no system of philosophy or philosophic thought is wanting in the crown of education, and its own teaching must be more or less in confusion. If the education in our public schools, therefore, is not to move forward in the dark, it must receive into it light and direction from such relative end to which it points and in which it finds its completion.

In asserting this principle, it is not intended to deny all possibility of progress and development from the lower to the higher in the way of experiment and discovery, according to the inductive system. This system has its measure of truth, but it can never be certain of its position at any point unless complemented by the theory of deduction, according to which facts can only be fully understood in the light of general principles in which they are comprehended. Life and light are thus continually beaming down from above, like streams that flow from the mountain side to refresh the valleys and plains below. Thus, the light from the high school and the normal school reaches down to illumine the work performed in the schools below them. Blot out these schools of higher grade, and the lower ones will soon be left without guiding principles, and, as a necessary result, they will soon fall into helpless confusion. But we cannot stop here. The character of these schools of higher grade must in the same way receive light and direction from the course reached in the college or the university. The leading teachers in the high schools and normal schools must receive their qualifications from institutions in which the best liberal culture is secured. Blot out the college and the university, and the normal and high schools must necessarily lose all proper life and power, and gradually retrograde into a state of inefficiency. Thus, we see that so far as the work of education makes progress, the lower stages must always be dependent for guidance and direction on the higher.

An ideal system of education requires organization and unity. It should culminate in a University, by which we need not necessarily understand a particular institution, such as Oxford in England, but a bureau of direction and control which would be able to infuse right principles into all the parts. This is the plan or system adopted in the countries of the Old World, where the interests of education in all its stages are directed so largely, if not exclusively, by the government. Ideally or theoretically it is consistent and logical; and if in our country, as in those, the government exercised the same control over education, we would undoubtedly come to the same results.

Of course, this implies that the State has not discharged its full responsibility when it has provided for a mere rudimentary education which will prepare the young with the least training necessary for the industrial pursuits of life. There are those, indeed, who entertain that view of the responsibility of the State—that it is concerned merely with the physical and secular ends of life; and they claim that our public education is already carried beyond the limits over

which the State properly has supervision; that it should provide merely for the common necessary branches of reading, writing and arithmetic, and leave the rest to private supervision. That, however, is a low and degrading view of the State. The spiritual side of man's being is of greater importance than the physical, and the State has a guardianship here also to fulfill. To set up mere physical well-being, making money, or industrial and secular prosperity, as the sole end of education by the State, is at once to degrade that education. The State has the moral welfare of its citizens largely in its keeping also, and it is bound to provide for their highest and best development in every point of view. Its highest calling is, not merely to promote secular prosperity, but to raise up *men*—men, complete so far as possible in their manhood—and to this end it is bound to employ all the means that properly fall within its sphere, without of course trenching on the rights of other organizations, such as the family and the Church.

That the State is under obligation to aid in providing, so far as the circumstances of its citizens allow, an education beyond what are called the common English branches, is already conceded practically in the provision made for High schools and Normal schools. The education provided in these schools looks beyond what are regarded as mere utilitarian purposes. Indeed, the utilitarian theory in education breaks down, or rather perhaps becomes merged in a higher theory, when it is considered that utility is best promoted in its broadest sense by the highest education the State is able to provide for its citizens. For utility when pressed cannot stop with the consideration of man's merely physical welfare, but must have regard also, and mainly, to his intellectual and ethical completion as a man—an immortal man. It is a concern of the State to aid in the highest development of the arts and sciences, and the promotion of the best liberal culture; and that not merely for its own temporal prosperity and glory, but for the sake of affording the best possible development of its people. The people are not for the State, according to the theory that prevailed in ancient civilization, but the State is for the people. What was so well said of our government by our martyr President may be said also of our public education—it should be an education from the people, by the people, and for the people of this great nation. But how can this high end be attained, if the State surrenders its responsibility just where the highest culture begins? If our system of education by the State regards merely the physical and industrial interests of its citizens, important as these are conceded to be in their place, and does not seek to comprehend also in its scheme the interests of higher intellectual and ethical culture for its own sake, or for the sake rather of true manhood, then indeed it must in the end prove a failure. And at this point in passing I may be allowed the remark that the interest of liberal culture for its own sake must ever take precedence also of what is coming to assert such exclusive claims, viz: practical and technic education. While I would not abate one tithe of the importance that attaches to this latter in its place, it is a death-blow to all true education to allow it to take the place of the former. Indeed, it should be understood that the two are not in conflict, for the true and the good are always practical; but the education of a true manhood is an end in itself, and should never be regarded as merely a means to utilitarian ends and purposes that pertain to the mere earthly side of man's being.

There is one other topic which has a bearing on our theme, that we may as well notice at this point, before we come to consider the practical side of our subject, viz: the relation of religion to education. Our public schools, in harmony with the theory of the government that it dare not patronize or favor any particular church or religion, while it equally protects all, do not provide for any direct and positive religious teaching; whereas in our colleges the religious element is to some extent comprehended in their culture.

It might be supposed that this fact must involve the two in conflict in such a way as to hold them on different planes, which may run parallel, but can never approach each other. If this were the case—if the State education were of such character that it can suffer no alliance or conjunction in any form, even in the way of complementation, with the Christian religion—it would, indeed, be its own condemnation, and contradict the best intentions of the people and the spirit in which education in this country had its origin all over the land. The problem is, no doubt, involved in difficulty, so far as the public schools are concerned in themselves, but we cannot believe that the difficulty lies at this point. While the common schools may not consider it their prerogative to teach religion immediately and directly, it is not meant by this that they must shut out the influence and principles that flow forth from Christianity touching morality and life, much less that they must refuse any alliance with institutions of a Christian character which may serve to complement their special work, especially when this alliance is free, so far as the individual students are concerned. The education of this country was established in its ground principles before the public school system came into existence, and we take it that this system was never designed to antagonize what had thus been established by the free beneficence of the people. While the State may not teach religion or patronize any religious sect in any of its institutions, it does not follow that it must antagonize Christianity, or refuse to accept its benign teaching and influence so far as these have place in its particular sphere.

If the positions we have thus far assumed be true, we may infer that there is an internal and necessary relation between the education carried forward in its higher and lower forms, between our colleges and common schools. This relation makes itself felt even where there is no outward and formal connection between the two. The highest scholarship of the country, and I may say of the world, becomes thus a sort of common inheritance, which, like the sunshine and the rain upon the earth, is continually refreshing and invigorating all the laborers in the work of education below. But when we come to consider the more practical aspects of our theme—viz., the form in which this relation is to assert itself—we meet with great difficulties. There are three organizations that have a calling and a duty to engage in the work of education: the Family, the State, and the Church. The obligation rests upon each. Where there are duties, there are also rights. There are certain rights which belong to the family in regard to the kind of education the children are to receive, which may not be invaded by Church or State. So, also, there are rights on the part of the Church and of the State in reference to this interest, which each is bound to respect in the other.

It is a matter of history that the interests of higher education have been provided for generally, not by

the State, but by the different church organizations and private beneficence. This is true of the colleges in Pennsylvania. These institutions have grown up under the protection, if not the guardianship of the State, and they serve an important purpose in providing for the interests of liberal culture in general, and in educating young men for the liberal professions. Some of them in former times received pecuniary aid from the State. Although not under the direct supervision of the State, they belong to what may be called an *estate* in the Commonwealth, and should therefore be recognized by the State.

The first question, now, that may arise, is, whether the State should ignore these institutions, endowed and maintained by its citizens in this free way, and set about organizing separate institutions of a higher grade for its own independent purposes? By no means, we should answer. If, indeed, these institutions were of such a character that a large or considerable portion of its citizens could not have their wants satisfied in them, we might perhaps answer differently; but we know that while the colleges of this State are generally under the control of some religious body, the course of education maintained in them is of such a character as not to trench on the conscience of any class of our citizens; and so far as they do provide special religious teachings, these are either optional or so diversified as to meet the wants, even in this respect, of our citizens generally. To ignore them and establish duplicate institutions under the direct supervision of the State, would impose a double burden of taxation on our people, and interfere with that measure of freedom which the State has hitherto wisely granted, we think, to the independent beneficence of its citizens.

It must be conceded, that the colleges are doing a work in higher education which the State would have to do if they were not in existence. Just as the State recognizes and protects, if it cannot positively aid, voluntary eleemosynary institutions, which afford help to the weak, the afflicted and the helpless, and regards them as doing, in part, a work of charity for the State; so colleges may be recognized as in part also laboring in the interests of the cause of education for the State, though laboring in an independent capacity.

Another question then arises, viz.; whether the State ought not to render aid to the colleges in some proportion to the benefits received, as in the case of the High schools and Normal schools? Theoretically this would seem to be a rational inference, but practically the question is involved in great difficulty. To aid them all, to any considerable extent, would impose a heavy burden; for it is conceded that their number is larger than the interests of the State require. To select a certain number for State aid might be regarded as invidious towards the remainder. Moreover, if the State should render such aid it would seem but reasonable that it should have some voice in their direction and control. They would perhaps have to come, to some extent at least, within the general State system. Would the colleges be willing to come under such joint control? Church institutions are naturally jealous of the interests of religion in their education, while the State aims to stand free from any religious bias in its educational work.

And yet we do not believe that any serious difficulty would arise practically at this point. Special theological teaching is referred to the theological seminaries, while the colleges incorporate the principles of Christianity in their teaching in such a catholic and unsectarian form that no collision would need to be apprehended here. And so far as any question might be raised in reference to this point, we apprehend that the public sentiment of the people would welcome the healthful religious influence which in this free form would go out towards the public schools by a close alliance with the colleges.

The chief difficulty here is to be found, in my judgment, not so much in regard to Christianity itself and its relation to education, but in the presence rather of sectarianism and the divided state of the Church. This difficulty is so great that for the present at least it seems to me to be an insuperable barrier to the kind of alliance referred to—I mean the plan of giving pecuniary aid to our colleges by the State. Still we believe this point is worthy of earnest consideration by those who direct the affairs of the bureau of education in our State. If not just now, perhaps at some future time, when our collegiate system itself shall emerge from the confusion which now embarrasses it, and becomes better organized, the State may see its way clear to be represented in one or more of our colleges, which shall have charge in some way of the interests of higher education in its relation to our public schools. The time will certainly come when a necessity will be felt for some organic union of the kind hinted at, if the whole education of our State is to reach that complete organization and homogeneity which are necessary to its highest perfection.

Leaving this point now, I pass on to consider in the remainder of my address two points which I consider of great importance, and which, it seems to me, are within the reach of practical realization.

The first one is, a mutual arrangement by which the public schools of the State may prepare such of their students as may desire to pursue a full course of liberal education for entrance into our colleges. This, I know, is already done in some of the High schools of the State. The High School at Easton, for instance, prepares its pupils for entrance into Lafayette College. The High School at Lancaster yearly prepares some of its pupils for Franklin and Marshall. The same thing is doubtless done in others. In our leading cities, the course of study in their High schools doubtless extends beyond this. But we believe that this connection might be extended more generally throughout the State, and that without interfering with any independent course of study which may be pursued in the public High schools and in the Normal schools.

There is no good reason why at least some of the schools in our rural districts, by a proper classification and perhaps union within a given section, might not raise the standard up to this point in their course of study. It is true, there is another class of intermediate institutions that comes into consideration here—the independent academies and boarding schools, which are doing a noble work and are worthy of honorable mention. They have a calling and mission to fulfill which will continue to be a necessity. I recollect that a few years ago President McCosh, of Princeton, laid great stress on the opinion that the greatest necessity of our higher education is a higher standard and more thorough training in our academies. I endorse the opinion heartily, but I would extend it so as to include our public High schools. So far as the colleges are concerned, one of the greatest difficulties under which they labor all over the country is the want of more thorough drill in the various preparatory studies.

It may, indeed, be said that this would tend to

direct the public education of the State in favor of the few to the detriment of the many. But that objection has already been met and practically answered in the establishment of public High schools, in which comparatively few reach the goal of graduation. It need not be to the detriment of the *many* that the State facilitates the advancement of *some* whose talents and circumstances prepare them for the attainment of the best education the institutions in the State afford. Indeed, the effort should be to place such opportunity within reach of the poorest and the humblest pupils in the land. On the principle of the survival of the fittest, there will always be those from that class who will work their way up to the highest degree of culture and the best preparation for useful lives.

In order to carry out this plan or idea, certain questions would have to be met and settled—the question, for instance, whether it would necessitate double courses of study in the High schools. It might be supposed that a boy who does not intend to go to college needs a very different course of study in the High school from that of one who does. But if the system of study in our colleges is wisely ordered, that difference, I apprehend, would be less than is often imagined. The disposition to make education practical and technical down in the preparatory studies, before it has begun to be fairly theoretical, is, to say the least, of questionable wisdom. It sometimes runs into utter absurdity, as in the case of a father who did not want his son to study geography, because he did not intend him to become a sailor. I think this intelligent Convention will sustain me when I say that what is needed *first* in all sound education is thorough discipline and culture with reference to the development of manhood, and *then* the practical or technic application.

In general, the difficulties will decrease when properly examined, and if approached in the right spirit on both sides, they will yield and will soon be overcome.

Once more: A great deal will be gained by cultivating a spirit of confidence and good-will between the colleges and the public schools. Much has already been accomplished in our State already, by the free intermingling of teachers from both classes of institutions, and the free and candid interchange of views. Pride of opinion and prejudice are the fruits of ignorance, not of culture.

Let there be cultivated a spirit of respect for the scholarship and culture of our colleges among the pupils of our common and high schools. Let them be taught that so far as liberal education is concerned, it is to be sought after and found there. Let there be no distrust of colleges instilled into them. Let it be conceded in the Normal schools that while the course there serves great practical ends, yet that those who desire a more complete education should seek it in the colleges. Let them encourage those among their pupils who may have a desire for such higher training to prepare for entrance there. *Then*, let there be cultivated in the colleges a proper respect for the common schools, a proper sympathy with those who toil in them—in short, a fuller confidence and closer fellowship between all who labor in both classes of institutions for the advancement of the common cause of education; and this will to some extent serve to prepare the way for a closer alliance between the two classes of institutions, and perhaps hasten that complete organization of education in the State which we desire.

On motion, an Auditing Committee was appointed, consisting of Messrs. A. N. Raub and A. D. Glenn, and Miss Florence E. Sickel.

HIGHER EDUCATION.

After a short recess, a discussion took place upon the general subject of Higher Education, as presented in the Inaugural Address of Prof. Maris and in the paper of Dr. Apple.

Prof. J. A. Cooper, of Edinboro, said, as he understood the argument, it assumed that if the State supported the colleges, more young men would attend them. How many more? Most, if not all, of the colleges of the State are now open free to those who cannot pay for tuition. Would any more be enabled to go by State support for the institutions?

Dr. Geo. P. Hays, of Washington and Jefferson College, said the term bills at colleges were not the difficulty anywhere—it was the expense of boarding and room rent, and no one proposed that the State should pay for that. Lehigh University gives free tuition, but has scarcely any students; the State College in Centre county, with its faculty of twelve professors, and three experimental farms, has thirty-nine students. So free tuition evidently does not answer the question. The same subject was presented by A. D. White, of Cornell, at Detroit, where he exalted the wisdom of Michigan displayed in its University, at the expense of the stupidity of Ohio in not doing likewise. Yet at that very time Ohio had more students in proportion to population, in her many little colleges, than Michigan in her University and colleges combined. And certainly we are not in a position to depreciate the graduates of these Ohio colleges, when they are now filling the Presidency and nearly all the subordinate offices of the government. He was not willing to concede that there are too many colleges in Pennsylvania. We find by statistics that in every county where a college is located, the proportion of young men receiving a liberal education is doubled, because parents can educate their sons nearer home and at less cost; and thus the number of educated men is very considerably increased. The size of the institution is not of so much consequence.

Whether it be at the large or at small colleges, what a man gets out of the course depends more on what brains he has than on the learning of his teachers. The difficulty

is not to get learning enough, but to get brains enough. He took issue with the notion that the State should have a system including the common schools, the high schools, and a single great college. Except Rhode Island, such a plan would not be the best for any State. The colleges should be more numerous than the law would make them. Not a single college in this State could be spared, if they would do thorough work. One thing he believed was desirable—that there should be in this State an organization similar to the University of New York—not a faculty of instruction, but a board of examination, who shall determine what *is* a university, a college, a normal school, a high school, a common school. We need to have the grade of our institutions settled, that we may know which are academies for preparatory work, and which are colleges, *real* colleges, with a regular four-years course; and let the University be relegated to its proper post-graduate work—preparation for specialties and the learned professions. In conclusion, he believed it would be well for this State that private munificence should not only endow all the institutions of high grade we now have, but also inaugurate new ones in other localities.

Prof. J. A. Cooper: Another argument used is that higher schools are needed as a stimulus to the lower. The series must end somewhere; where shall we get the stimulus for our University? Now, there must be some point where the State shall stop in the education of its people: it is not to be supposed that they shall spend their lifetime studying at the State's expense. Where shall we stop? seems to be the question. We want to find the line.

Prof. G. L. Maris: It is shown by statistics that not as many boys and girls go to college in Pennsylvania now, in proportion to population, as did seven years ago; and the defects in the system should be credited with some share of the responsibility. There being no organic connection between the public school and the college, there is not the same incentive to progress. Public sentiment does not favor college-going; the pupils generally look to graduation from the high schools as the completion of their education. Even where they might wish to go on, the course in the public schools does not touch that of the colleges, and there may be no preparatory school within their means.

All this may easily be remedied by a symmetrical State system, with a course continuous through all grades to the top. One of the evil results of the present system is the lowering of the grade of many institutions called "colleges;" we have heard here that some of them are no more than preparatory schools; this will be so as long as there is no authority to fix the grade. One of the great advantages of a single large institution in a State is that all the young men are brought in contact with the many eminent men who constitute the faculty, and whose personal influence infuses a spirit which marks the value of the college more than the instruction given; of course much of this is lost when the forces are scattered among a number of smaller schools, where the pupil comes in contact with fewer and less eminent instructors; besides, the enthusiasm that accompanies large assemblies is lost. It is true that in most colleges a man may receive free tuition; but it is a sort of pauperism, and he is made to feel it as a degradation to accept such aid. The State institution puts all upon an equal footing. The great advantage of a complete State system is that it first educates the people with respect to the value of higher instruction, and then gives them the opportunity of receiving it as a right, not a favor.

Miss Emma Gillett said a pupil who received aid in the manner referred to, would have his manhood impaired; it was encouraging a sort of pauperism. If all were taught at the expense of the State, no such feeling could result.

Dr. G. P. Hays: Yale and Harvard both have large funds for this "encouragement of pauperism," as they call it. We find the men who have been thus assisted, in Professors' chairs in colleges and theological seminaries and other positions of eminence, and they do not seem to have suffered by it. The truth is, very few know which of the students are thus aided, unless they tell it themselves; and when they do that, they are not much ashamed of it. With regard to the quality of the small Pennsylvania colleges, there is no wall around the State to prevent emigration to States that have better schools; yet our colleges live. The fact that fewer in proportion go to college in the last few years is not only true of us; it applies also to New England, and even to Michigan. It ought to be remembered that in the large institutions the instruction in the early part of the course is not given by those eminent gentlemen referred to by the President, but by tutors, whose influence

can hardly be better than that of the professors in the small colleges, who are in contact with the students all through the course. As to the enthusiasm of numbers, the large classes are divided into sections of twenty or thirty, about the same as the classes in smaller colleges. If we judge the quality of institution by their graduates, it may be remarked that in these old and rich schools the students are in great measure rich numskulls; while we all know that most of our strong men come from poor homes. Why do not our great men come from these "great" schools? State institutions do not remedy the evils of "small" schools. In the great State of Michigan, there are as mean little dwarf colleges, doing as poor work, as anywhere in the United States; and in the present state of politics, we are not *always* sure that the officers of State institutions will be selected for their capacity or honesty. So the settlement of this question is not likely to be plain sailing, though earnest effort in whatever direction is commendable. He was not sure whether it would help or harm us for the State to support and "run" the colleges; the experience of institutions supported by different States has not been uniformly in their favor; even where the best State Universities are located, private endowment is building up colleges beside them which send out alumni comparing favorably with any others. Perhaps we had better not interfere with free trade in education.

Prof. Apple said he had expressed no opinion as to there being too many colleges in Pennsylvania, but only said their number and location would prevent all receiving State aid. He endorsed President Hays with respect to the efficiency of the teaching in the small colleges of Pennsylvania—those that *are* colleges, with a four-years course, not the academies and boarding schools. We find good schools going down or consolidating, not because they are not doing good work, but because of their want of means. Pennsylvania should see to it that these good schools are not suffered to go down, but that they are furnished with such means and inducements that our young men will stay at home to be educated.

Supt. Buehrle said he would ask for the postponement of this question for further discussion this evening, when he hoped the high school feature would be taken up.

The postponement was ordered, and Association adjourned to 8 p. m.

TUESDAY EVENING.

EXERCISES opened with a song entitled "Teaching Public School," by Prof. White and chorus.

Dr. S. P. May, of Toronto, Ontario, then read a paper on "Pedagogical Museums."

PEDAGOGICAL MUSEUMS.

DR. S. P. MAY.

THE subject on which I am appointed to address you is one of very wide scope, and of very great importance at the present time. Practical Science is so intimately connected with the advancement of commerce, that pedagogical museums have become an absolute necessity for the progress of manufacturing nations.

Although, strictly speaking, public museums are not pedagogical museums, still, they are no longer mere collections of curiosities, but are the means of imparting useful information; therefore, as a school is defined as a place where instruction is given, I consider all museums as especially intended for teaching purposes, and shall briefly refer to the benefits derived from museums, whether public, private, or scholastic.

In order to make a more comprehensive description, and to more thoroughly explain my views on this subject, I have divided museums into four grades or classes.

1. Primary, Graded and Grammar School Museums.
2. Government or State Educational Museums.
3. Industrial and Technical School Museums.
4. Public and Private Museums.

But time will allow me to refer only to the first two of the classes named.

PRIMARY, GRADED AND GRAMMAR SCHOOL MUSEUMS.

It is only recently that the attention of educationists has been directed to the importance of School Museums. It is true that Object Lesson teaching has now been adopted for many years, but that does not supply all the requirements. What we want is a small museum in every school. This scheme may seem to be Utopian in the minds of many teachers who have successfully taught during the past quarter of a century; yet it is not only feasible but also practical.

When Pestalozzi, at the close of the past century, commenced his system of industrial training for children in Switzerland, although a poor man, he not only gave free instruction but clothed his pupils gratuitously, until he attracted public attention; and to his zeal and devotedness is due the introduction of a method of teaching that has made his name known as a public benefactor among all civilized nations. Teachers of the present day would have none of his difficulties to contend with, even if they were determined to establish a museum in every school-house. As some persons may have their doubts of the usefulness and the necessity of school museums, I shall, before adverting to the kind of collection, easily attainable, that would be of most value, refer to the advantages that would be derived therefrom.

I shall commence with Primary Schools. It is now

an acknowledged fact that Object Lessons will teach a child to observe, and as early knowledge comes through the senses, Object Lessons are the most important adjuncts to teaching, by giving systematic employment to the senses.

The chief aim of the teacher of the primary or elementary school should be to form the character of the children and prepare them for the duties of after-life. Every child has a mind gifted with wonderful powers and faculties of observation, and if these faculties are cultivated, intelligence is awakened, and the child is put in possession of information that is useful for his future progress. The easiest and surest method of doing this is to employ the senses. The child should examine with the eyes and hands the article which the teacher is describing; it then becomes of interest and is imprinted on the mind, and ideas are formed which the child can recall afterwards of its shape, color, etc.

I contend, then, that the future educational success of the pupil depends upon the awakening of the perceptive faculties, and that it is far more important to develop these faculties than to stimulate the memory of young children by words they cannot understand and to which they can attach no real meaning. Children before attending school, first become acquainted with things, then words: this is nature's plan of teaching, and should also be adopted at school.

I cannot refrain here from giving an extract on the employment of the senses from one of the Annual Reports to the Board of Education in Massachusetts, by that distinguished educationist, the late Hon. Horace Mann. He says: "About twenty years ago, teachers in Prussia made the important discovery that children have five senses, together with various muscles and mental faculties, all which, almost by a necessity of their nature, must be kept in a state of activity, and which, if not usefully, are liable to be mischievously employed. Subsequent improvements in the art of teaching have consisted in supplying interesting and useful, instead of mischievous occupation, for these senses, muscles, and faculties. Experience has now proved that it is much easier to furnish profitable and delightful employment for all these powers, than it is to stand over them with a rod and stifle their workings, or to assume a thousand shapes of fear to guard the thousand avenues through which the salient spirits of the young play outward. Nay, it is much easier to keep the eye, and hand, and mind at work together, than it is to employ any one of them separately from the others. A child is bound to the teacher by so many more cords, the more of his natural capacities the teacher can interest and employ."

There was probably no contemporary of Horace Mann's equally capable of appreciating and judging of the merits of this system. In his youthful days, he says, "Teachers are very good people, but they are very poor teachers;" and we all know the almost insurmountable obstacles he overcame when a poor lad by his untiring industry in obtaining that education which subsequently made him known throughout the civilized world as an educationist, a philanthropist, and a statesman.

Wherever object teaching is adopted, I should recommend the teachers, so far as possible, to teach from *real objects*. I do not for one moment wish to disparage the value of engravings, for it is impossible to teach successfully without them. Pestalozzi's attention was first directed by a child to the fact that *real objects* are better for teaching purposes than engravings. The poor children confided to his care were in a very degraded state, and it became necessary for him to adopt some plan to arouse their dormant faculties. He obtained a series of engravings of objects familiar to children. One day the engraving presented to the children was a ladder. A little boy exclaimed, "There is a ladder in the court-yard! Why not talk about it, rather than the picture?" The master replied, "It is more convenient to talk about what is before your eyes than to go into the court-yard to talk about the other." Soon after, a picture of a window was the subject of the lesson. The same little boy said, "Why talk about this picture of a window when there is a real window in the room, and there is no need to go into the court-yard for it?" When the circumstance was mentioned to Pestalozzi in the evening, he said, "The boy is right; reality is better than counterfeit; put away the engravings, and let the class be instructed by means of real objects."

Of course, it is not always possible to get real objects, but models of many things applicable to everyday life can easily be obtained. This system of training was adopted for infant schools in England by Wilderspin, in 1824. He was subsequently invited to Scotland by David Stow, founder of the normal schools, and as a proof of his success, at the end of a month the children were examined. Wilderspin's biographer says: "The children, who were from eighteen months to six years of age, and were unable to walk so far, were conveyed in carts, adorned with green boughs, guarded on each side by the Glasgow police, and followed by crowds of people. Inside of the church the audience numbered about 1,000, and in their presence questions on form, size, and position were put and answered. A gentleman asked whether the chandelier was suspended or supported, and, on a correct answer being made, he asked them to tell him the difference, whereupon a little boy took from his pocket a piece of string, at the end of which was a button; placing the button on the palm of his hand, he answered, 'That is supported,' and holding the end of the string so as to let the button fall, he said, 'That is suspended.' Other questions were put and correctly answered, which proved that this method was the best for teaching young children. Wilderspin used engravings for his classes, and strongly recommended the use of small object-lesson cabinets.

SCHOOL MUSEUMS.

Having referred to the advantages of Object Lesson teaching, I shall now describe what I mean by School Museums. It is not necessary to have a special room for the museum. A glass case or cupboard with lock and key will hold a large quantity of specimens. In Ontario, cabinets are specially prepared, containing about 200 specimens from the Vegetable kingdom. These are systematically arranged so that the teacher can give successive lessons on the uses of a plant, its manufactures, and its applications to every-day life. For example, take wheat; in this cabinet there is a sample of the seed, flour, bran, bread, biscuit, macaroni, straw and straw manufactured. The child is thus led to understand the various uses of this important article of food, its history, value, etc., and enabled to compare it with various other cereals, such as barley, oats, rye, maize, etc.

These cabinets serve a two-fold object: the specimens are classified and systematically arranged, so that they may be used in the higher classes for teach-

ing Botany. That you may fully understand this, I will read the list of contents: Exogenous plants are represented by the cress family, 3 specimens, mallow 17, linden 3, camellia 2, cocoa 4, flax 12, grape 5, soapberry 3, pulse 11, rose 2, myrtle 3, parsley 1, sunflower 3, madder 3, sage 1, nightshade 2, olive 3, sappodilla 2, buckwheat 3, laurel 2, spurge 4, nutmeg 2, nettle 8, pepper 4, walnut 7, oak 9, birch 1, willow 2, pine 8; and Endogenous plants by the sarsaparilla family, 1 specimen, palm 1, iris 1, rush 1, lily 1, grass 27, ginger 3, arrowroot 1.

Other similar Cabinets are being prepared, illustrating the Animal and Mineral kingdoms. We will take the sheep from the Animal kingdom as an example. First, a drawing of the animal is exhibited, then the wool, woolen cloth, parchment, catgut, etc. From the Mineral kingdom take iron; the mineral, metal, and articles manufactured from the metal are exhibited. It is not actually necessary to go to the expense of getting these cabinets, which are sold in Ontario at $5.00 each. The pupils should be encouraged to bring all kinds of material to the school, pieces of wood, metal, linen, cloth, leather, etc. Each of these objects in turn will serve for a lesson under the direction of a skillful teacher. In this manner children will be trained to examine and compare one thing with another; they will also learn the quality of the material, and particulars respecting its manufacture and price, in comparison with other similar products. Thus they receive a gradual, almost imperceptible, practical training, that will be serviceable to them at once upon their leaving school. Suppose, for example, a girl has been trained in such a school and made familiar with the textures, qualities, and to a certain extent the commercial values of various fabrics. She would not be subjected, when first commencing to do her own shopping, to the impositions of dishonest tradesmen. How valuable too is such a training to boys. No matter on leaving school whether they are to be apprenticed to trades, or intend studying for a profession, the practical knowledge acquired at school in regard to trades and manufactures gives them confidence in themselves, and in some instances they will know as much, perhaps more, of the details respecting the history, material and manufacture of certain articles, than the shopkeeper, who may have devoted half his life-time to his business.

A school museum can, in this way, be formed at a trifling expense, which will be invaluable to teachers and pupils. I would encourage the formation of school museums, no matter how insignificant their commercial value. Having started the nucleus of a museum for the Primary schools, it is very easy to extend it for the different grades until we reach the Grammar school. The pupils should now be encouraged to collect minerals, zoological specimens, etc. An entomological collection is soon obtained by a few enthusiastic youths. Ornithological specimens can be got if the boys are taught to skin birds. If there is not time for this, the mandibles and feet of the bird can be saved. I remember some 28 years ago this science, in some parts of England, was taught exclusively by learning the construction and form of the skull, feet, and sternum, or breast bone, of the bird. Typical collections of stuffed birds and insects; also small collections of minerals, rocks and fossils, are kept for sale in the Educational Depository at Toronto.

How easy would it be to collect botanical specimens! They should be collected in season, and botany taught from the fresh plants. Grammar schools should also have collections of models and scientific instruments. The Properties of Matter, Pneumatics, Hydraulics, Hydrostatics, Mechanics, Steam, Chemistry, etc., can be most effectually taught by the aid of scientific models. I am well aware that a great objection will be raised that all these cost money: quite true, but an ingenious teacher with a few intelligent pupils can construct and extemporize many pieces of apparatus at a very low cost.

Suppose I wish to give a course of lectures on the Atmosphere. I can fully illustrate, by experiment, its properties, etc., without expensive apparatus. The elements of which it is composed and the compound bodies which are found in it can be shown by means of a few glass flasks and chemicals for a mere trifle. The essential properties of matter can also be exhibited at a very small cost. Inertia can be explained by a coin and card on the tip of your finger, and practical illustrations given by railway cars, boats, etc.; Impenetrability can be explained by the aid of a bottle with a funnel accurately ground to fit the neck of the bottle; Indestructibility, by burning a piece of magnesium wire; Divisibility, with the aid of a cheap microscope; Pressure of the atmosphere, by a small air pump, hand glass and bladder, or, if not attainable, by a glass of water and card; Cohesion of solids, by scraping and pressing together two leaden bullets; Cohesion of fluids by a little ether, spirit lamp and glass flask. In a similar manner numerous lectures could be experimentally illustrated at a very small expense. Sufficient elementary experimental chemistry for Second Class teachers' certificates is taught in Ontario with a laboratory that costs the teachers only $5.

The success of a teacher does not depend upon his collection of expensive apparatus, but his aptitude to prepare his own apparatus; a few glass tubes and flasks in the hands of a skillful teacher will do wonders; it will also develop the inventive powers and expand the minds of the senior pupils. The training which they previously received now comes into force; they think and reflect for themselves, and show that their minds have been educated; there is employment for the higher faculties which gives birth to new and important principles.

To return to the contents of the school museum: Primary schools should have real Object Lessons, Models and Engravings, as the grades ascend. Apparatus illustrating Natural Physics, specimens of Mineralogy, Zoology, Physiology and Botany, should be obtained. To the importance of educational models it is scarce necessary for me to refer at greater length. It is well known that a better knowledge of the structure of the human body can be obtained in a few hours by the aid of good anatomical models than can be learned from books in as many months.

Ethnology, History and Biography should also be illustrated by small busts of representative men celebrated in History, Science, etc., in different parts of the world. The use of these busts not only leaves on the mind a lasting impression of historical events, but it inculcates a taste for the beautiful. If the schoolroom is adorned with works of art, the pupils' ideas are associated with things of beauty as well as utility. Ruskin, in speaking of the decoration of the schoolroom with busts and paintings, says: "How can we sufficiently estimate the effect on the noble mind of a youth, at the time when the world opens to him, of having faithful and touching representations put before him of the acts and presences of great men—how many resolutions which might alter and exalt the

whole course of his after-life, when in some dreamy twilight he met through his own tears the fixed eyes of those shadows of the great dead, unescapable and calm, piercing to his soul; or fancied that their lips moved in dread reproof or soundless exhortation."

At the Educational Department, in Toronto, we keep small busts for sale, which are reduced copies from the South Kensington Museum, and can be relied upon for their faithfulness and accuracy of finish.

Drawing models should also be kept in every school museum. Elementary, mechanical and industrial drawing should to a certain extent be taught in every primary school. Large plaster models of fruits, leaves, etc., can be procured for about 40 cents or 50 cents each.

SCHOOL PRIZES.

Before closing my remarks on Primary and Grammar School Museums, I may state that, in Ontario, we encourage the formation of museums by giving scientific toys, educational games, etc., as school prizes. We recently issued a catalogue of 150 different articles suitable for school prizes, representing the following subjects: Natural history, optics, chemistry, magnetism, steam, drawing, books and instruments, ladies' work, girls' prizes for domestic economy, puzzles and scientific toys, building models, representations of useful arts and manufactures, etc., varying in price from 20 cents to $10 each. This catalogue was accompanied by a circular on the formation of museums in the school room, from which I will give an extract:

"In many of our public and high schools, boys are found to whom a book would be a much less valued prize than some object which would gratify his laudable curiosity, and stimulate his zeal for knowledge, as well as his desire for inquiry into the 'reason and nature of things.' For such pupils some of the best of the numerous Scientific Models, Illustrations and Objects have been procured, from which a selection may be made by trustees and teachers, who know the tastes and peculiarities of those for whom it may be most desirable to obtain such prizes.

"It has long been thought by the most experienced educators wise and judicious to cultivate this spirit of inquiry and observation in boys and young people in our schools. In the opinion of many scientific men (as expressed by Agassiz), it is there the true educational idea of museums is suggested, and it should be stimulated and fostered in our schools in every possible way. There is no reason why in certain localities in Ontario, where fossils and minerals are abundant, the pupils should not be encouraged to make small collections for their schools. Whether the pupil can sufficiently appreciate the distinction between the specimens he may collect, so as to classify them, is not so material at first. He would naturally separate the different kinds he would collect; and under the direction of the teacher he could arrange them all nicely on the shelves of the little school museum. In every locality objects of natural history, such as Beetles, Insects, Leaves, Flowers, etc., might be collected in their seasons on Saturdays, and arranged for the amusement and instruction of both pupils and teachers. It is surprising to see how rapidly these small school collections grow where the interest of the pupils in such matters is stimulated and encouraged by the intelligent teacher, aided by the trustees. The promise by the latter of such a prize as *a pocket microscope, a magnet, a prism, a compass, or other object*, would have a wonderful effect upon the industry of many a now undeveloped insect hunter, and the leaf or wild-flower gatherer, and would lay the foundation of many a now non-existent school museum, which might be made to develop into the lasting source of great pleasure and profit to a neighborhood. Boys are naturally curious and observant; and it is a great loss to a school, and a misfortune to such boys early in life, not to turn such instincts to practical account, and utilize them for the benefit of themselves and others. Thousands of young men would in after-life, under God's blessing, be saved from many a snare and temptation, were their undeveloped tastes and instincts directed into such simple scientific channels as these while at school. Many an 'idle hand' would be saved from the 'mischief' to which they are so prone; and many a valuable contribution to scientific research might thus owe its first idea to the stimulated curiosity of a school-boy in many of our rural sections. That this is the feeling in other countries may be gathered from the fact that in England, France and Germany, the ingenuity of manufacturers has of late been largely directed to the preparation and construction of the numerous scientific toys which are now so largely used in these countries."

CENTENNIAL EXHIBITS.

In other countries, too, school museums are established. Those who were fortunate enough to have had time to devote to the educational exhibits at the Centennial last year must have noticed that several countries, distinguished for their systems of education, gave evidence of the importance they attach to school museums by exhibiting numerous specimens from the animal, vegetable and mineral kingdoms. As it is possible that some persons present may not have seen those collections, I will briefly refer to them:

Sweden showed her appreciation of object-teaching by exhibiting in her neat little school-house a very fine collection of stuffed birds, fishes, plants, minerals, etc. The specimens were not only well prepared, but were in natural positions, showing that taxidermy is well understood in that country. I speak with confidence on this subject, as I am the proud possessor of two special International medals, awarded me last year, for excellence in these branches, which have been my favorite recreation and study for the past thirty years. There was also a case for object-lesson teaching exhibited, containing specimens from the animal, vegetable and mineral kingdoms, similar to those used in the normal and model schools in Canada.

Switzerland exhibited models and real object-lessons from the animal, vegetable and mineral kingdoms, some of which were from private schools. We find that even in that small country nearly every public school has its own scientific collection, and the pupils are encouraged to make natural history collections, which are explained to them as they advance in their studies.

Belgium exhibited object-lessons for illustration, consisting of plants, woods, seeds, grain, mammalia, birds, insects, shells, minerals, fossils, etc. Even Japan had a collection of natural history specimens, but these were probably from her Educational Museum. This country, however, exhibited object-lesson sheets for familiarizing children with the names, uses and appearances of things of every-day life; also, kindergarten toys of their own manufacture, raised pictures, etc. Brazil exhibited a few object-lessons. The system of teaching from pictures, models, etc., is thoroughly appreciated in that country.

France exhibited models and designs more adapted

for Industrial schools. These, however, were illustrations of the pre-eminence of this country in certain special departments requiring ingenuity and skill. In addition there were a few excellent and valuable exhibits from the different States of the Union, but as you are, no doubt, familiar with these, and probably know more of their details than I do, it would be presumption on my part to detain you with reference to them. The countries I have enumerated—with the exception of Russia and Canada, to which I shall refer more particularly when speaking of Pedagogical State Museums—are about all that gave proofs that they adopt a system of practical illustrations by object teaching and the formation of school museums. It is well known, however, that other countries, including England and Germany, approve this method. Having described what I consider the first grade of Pedagogical Museums, I shall now refer to the true Educational or Pedagogical Museums.

STATE PEDAGOGICAL MUSEUMS.

Every Province, State or Territory, should have an Educational Museum, or Depository, supported by public funds. This museum should contain everything applicable to teaching, from models of school buildings, and primary books, and objects for elementary teaching, to examples of the most highly finished philosophical instruments, used for demonstration in scientific pursuits. In Ontario we have an Educational Museum and Depository which has been in successful operation for about twenty-five years. It was commenced with a very small Government grant, and its establishment is entirely due to the foresight and sagacity of the late Chief Superintendent of Education, Rev. Dr. Ryerson. That gentleman prior to his appointment as Chief Superintendent was one of the leading ministers of the Methodist church in Upper Canada, and among other boons conferred upon that body by his enterprise and perseverance, was an arrangement which he made with the English booksellers, in 1833, to supply books to a Wesleyan Depository at less than the usual wholesale prices. Soon after his installation as Chief Superintendent, with a keen sense of the requirements of our schools, he visited Dublin (in 1845) and arranged with the National Board, to obtain their books for the schools in Canada at cost prices, which were far below the usual wholesale prices in Great Britain. Having introduced a series of text-books into Upper Canada and finding that his plan worked satisfactorily, the Doctor then turned his attention to the defects in Public Libraries. At that time the introduction of objectionable books, through the competition of publishers and interested parties, occasioned great evil; to remedy this, the Doctor deliberated upon and elaborated the system still adopted, which, as one of our Governor Generals, the late Lord Elgin, said, made the public school libraries of Upper Canada "the crown and glory of the institutions of the Province." In July, 1849, the Chief Superintendent submitted a scheme for the establishment of public school libraries in Upper Canada, to the Secretary of the Province, for the consideration of the Governor General in Council, in which he says: "There can be but one opinion as to the great importance of introducing into each township of Upper Canada, as soon as possible, a township library, with branches for the several school sections, consisting of a suitable selection of entertaining and instructive books in the various departments of biography, travels, history, natural philosophy, agriculture, literature, political economy, etc." After pointing out the salutary influence that would be produced on the entire population by the introduction of good books, the Doctor proposed that the sum of £500 should be appropriated for him to visit England and the United States to purchase specimen copies of the books required.

PUBLIC LIBRARIES.

In September, 1850, the Governor General in Council concurred in this appointment, and requested the issue of a warrant for £500. During the same year (1850), an act was passed for the better establishment and maintainance of public schools, when it became the duty of the Chief Superintendent to provide for and recommend the use of uniform and approved text-books in the schools generally, also to employ all lawful means in his power to procure and promote the establishment of School Libraries for general reading in the several counties, townships, cities, towns and villages, and to apportion whatever sum or sums of money shall be provided by the legislature, for the establishment and support of school libraries; provided always that no aid shall be given towards the establishment or support of any school library unless an equal amount be contributed and expended from *local sources* for the same object. It was further enacted, "That it may and shall be lawful for the Governor in Council to authorize the expenditure, annually, out of the share of the legislative school grant coming to Upper Canada, of a sum not exceeding £3000, for the establishment and support of school libraries."

With this small annual sum, and an unexpended balance of £2772 in 1851, from the school fund, which was applied to the purpose of fixtures, etc,. the Depository was established. At the close of the same year, 1850, Dr. Ryerson visited England, and with the assistance of Earl Grey, Her Majesty's principal Secretary of the State for the Colonies, and the aid of Her Majesty's Government, succeeded in procuring maps and books for libraries and schools in Upper Canada, upon the same terms as schools supplied by the Committee of the Privy Council in England. He also arranged with the British publishers, to supply library books at reduced prices, and afterwards made similar arrangements with book publishers in Boston, New York and Philadelphia.

After the books (over 2000 volumes) had been carefully examined, and he had advised with experienced educationists in the United States, the Doctor determined, before deciding upon any established plans for their distribution, to make a tour of Upper Canada, and submit the whole question to a convention in each county consisting of the municipal councillors, clergy, magistrates, local superintendents and school trustees; and I may say, that his proposed system received unanimous approbation in every county that he visited.

A Library Catalogue with short notices of the books, also library regulations, were prepared in 1853, under the direction of the Council of Public Instruction, and sent to every township in Upper Canada. A circular was also sent in which the Doctor says, "It now remains for the municipalities to act, and before I can proceed any farther I must know what the municipalities are willing to do in regard to the establishment of public school libraries. I am prepared to apportion the sum of £9000 among those municipalities who will co-operate as the law requires." This circular was cordially responded to; over two hundred municipalities applied for books

before the close of the year; and within twelve months from the establishment of the first library there were over 100,000 volumes sent out, valued at over $50,000, and up to the end of 1876 over a million and a quarter of library and prize books have been distributed by the agency of this Department throughout the Province of Ontario.

In addition a large number of Mechanics' Institutes and Sabbath-schools have been supplied with books at cost price, but no apportionment from the annual grant was made to them.

I shall now briefly refer to the duties performed by the Council of Public Instruction in the selection of these books.

1. No work of a licentious, vicious or immoral tendency, and no works hostile to the Christian religion were admitted into the libraries.

2. It was not in the opinion of the Council compatible with the objects of these libraries to introduce into them controversial works on theology or works of denominational controversy. The first list of books approved of and recommended by the Council of Public Instruction for municipalities to select from contained 2276 volumes, embracing the following subjects: History 419, Biography 325, Voyages and Travels 99, Physical Science 343, Ethics 48, Encyclopædias 24, General Literature, including Poetry, 519, Manufactures and the useful Arts 79, Periodicals 227, Practical Life, Tales and Essays, 392, Education 232.

The apportionment of the legislative grant was distributed on the same principle as had already been successfully introduced in the distribution of the school fund, viz: on *local exertion*, not on *property* or *population*. In this manner each municipality, whether city, town, village or rural school section, was aided in proportion as it exerted itself.

The present Minister of Education in a sketch of the Educational Institutes of Ontario specially printed for distribution at the Centennial, says: "The Province of Ontario possesses a system of municipal or local self-government, throughout the Province, which is symmetrical in its arrangement, is practical and rests upon the free action of the rate-payers in each municipality." He further pays a high tribute to the Rev. Dr. Ryerson, the founder of the municipal system, and gives the following quotation from an address given by the Doctor in 1851: "It is in Upper Canada alone that we have a complete and uniform system of municipal organization, from the smallest incorporated village to the largest city, and from the feeblest school section and remotest township to the largest county or union of counties. In each minor municipality, *local school corporations* are established, and these are governed by trustees elected by the rate-payers, who are liable for the support of the schools in their respective localities. The trustees have full power to levy a rate for the establishment of a circulating library, and may borrow, with the consent of the municipal council, money forschool purposes."

ONTARIO EDUCATIONAL DEPOSITORY.

To return to the Depository question, the first apportionment made by the Department was 75 per cent. which was added to all the sums raised by school-trustees. This was subsequently advanced to 100 per cent., therefore books were supplied at about one-third of the usual retail price; for example, books published in England at five shillings were charged currency for sterling or $1.00 for five shillings. One-half of this was paid by the municipality, and the other half from the Government apportionment; thus five shilling books cost the Trustees only 50 cents, the usual retail price for the same book being $1.30. This price was afterwards reduced to 18 cents for one shilling, so that a five-shilling book cost the trustees only 45 cents.

It is difficult to estimate the benefit Upper Canada derived from this diffusion of sound, healthy literature throughout the whole land. The most remote rural section received its proportionate number with the large cities, towns and villages. Of course, this system had its enemies: the booksellers thought it interfered with their trade, but facts spoke for themselves the Customs returns show that soon after the establishment of public school libraries the book trade rapidly increased, so that this branch of commerce has now reached a commercial position of no ordinary magnitude, it having risen from $200,000 to over $800,000 per annum. In connection with the Library Depository, a supply of text-books, maps, and apparatus was kept for sale; the first catalogue was published in October, 1852. This catalogue contains an excellent collection of maps and object lessons, but in apparatus it is very meagre, only Holbrook's Apparatus and a Geological Cabinet being kept for sale. Notwithstanding the fact that Dr. Ryerson, in 1851, presented each county council with about $30 or $40 worth of specimen maps, etc., kept for sale in the Depository, there was no spirit of emulation among the trustees, to provide the necessary equipments for their schools. The Doctor found that there must be some special inducement to awaken the apathy of school trustees to induce them to purchase school material; and as the library system had been a great success, he applied to the Legislature for further assistance, so that maps and apparatus might be supplied on the same terms as books. An act to make further provision for the Grammar and Common Schools of Upper Canada, which received royal assent in 1855, enacted that a special grant of "a sum not exceeding two thousand five hundred pounds per annum, may be expended in providing Grammar and Common Schools in Upper Canada with maps and apparatus, upon the same terms and in the same manner as books are or may be provided for public school libraries. This gave an impetus to the supply of maps and apparatus. Up to 1850, we had only 1814 wall maps in all the school rooms of Upper Canada, and only 168 schools had globes and apparatus.

From the year 1855 to 1875 (twenty years) the Depository has supplied to the High and Public schools of Ontario, 7450 maps of the world, 20,488 maps of the continents, and 23,017 other maps and charts; also 3004 globes, 875 sets of apparatus, 24,282 pieces of apparatus, and 273,510 Historical, Natural History, and Object Lessons in sheets, value about $500,000, averaging $25,000 per annum from the commencement. We now send out over $60,000 worth of books, maps, etc., per annum.

Of course, to enable us to do this, the Provincial grant was gradually increased. In 1859, the grant was increased to $36,000. The grant for the same purpose (including prizes) for this year, is $60,000. It must not be understood, however, that, although the whole grant in each year may be expended by the Depository, it costs the Government these large amounts, for it does not. Nearly one-half of the annual grant is refunded by the Depository, To explain this more fully, we will suppose that we use the whole grant of $60,000 in the purchase of school appliances; if we sell $60,000 worth of material we

shall receive one-half, or $30,000, from the trustees, and that money is refunded to the Government; so that the actual cost to the country is only $30,000 instead of $60,000.

SCIENTIFIC APPARATUS.

At the present time we have for sale in the Educational Depository, as exhibited by us in Philadelphia (irrespective of books and maps and charts) nearly 1,000 separate articles illustrative of the various branches of Natural Science. These I have classified under the following headings: Arithmetic, drawing materials and models, music, history and chemistry, terrestrial and celestial globes, geographical cubes, orreries, planetariums, geological and mineralogical cabinets, models of crystals, models of flowers, botanical object lessons, etc., zoological specimens of mammalia, birds, fishes and reptiles, ethnological and historical busts, anatomical models, chemical laboratories, apparatus for experimenting with gases, specific gravity apparatus, chemical thermometers, weighing apparatus, distilling apparatus, pneumatic apparatus, meteorological instruments, acoustics, light, heat and steam, frictional electricity, magnetism, electro-magnetism and mechanics and mechanism, hydrostatics and hydraulics, working models of trades, building models, kindergarten toys, etc. We have also a great variety of wall maps, charts and diagrams, object lessons, reading lessons, etc., and any of these can be procured by a rural section in the most remote part of the Province. This system of distribution by a responsible department is the means of disseminating more educational appliances than could possibly be done by private enterprise.

The usual difficulty in other countries is that collections of philosophical instruments are centralized in large cities. I find by the annual report of the Superintendent of Public Instruction in the State of New York, recently published, that during the year 1876, $80,000 was expended for school purposes in the county of Columbia. Out of this large sum only $1.41 was paid for school apparatus, and $19.57 for libraries, yet during the same year the magnificent sum of nearly $150,000 was expended for school apparatus in the city of New York. It is self-evident that the expenditure of such a large sum for apparatus in one city cannot be of so much benefit to the whole school population, as if it was spread throughout the whole State. There may be several causes why this immense sum was expended in New York. That city may have richly-endowed institutions, its people may be more liberal, and other equally strong reasons may be given; but there is no doubt that the difficulty of obtaining a proper supply of apparatus, and the high prices charged by dealers, have somewhat retarded the necessary supply being obtained in rural districts.

It would be a source of regret to every person interested in the progress of this great country if any obstacle was placed in the way of its advancement as a manufacturing nation. Now, I do not go so far as to say that the expenditure of large sums of money in fitting up colleges with expensive apparatus would be an obstacle to scientific progress; but it is my opinion that if the same amount was equally distributed for a supply of apparatus throughout the State, and natural science taught in every school-house, it would become a hundred-fold more valuable to the country.

At the present time scientific knowledge is required quite as much as practical skill in the manufactures. It is, therefore, necessary that the rising generation should be taught the elementary knowledge of science, which is the true education of practical life for those who may hereafter be engaged in any employment connected with the useful arts. Therefore, if science is necessary as a part of the instruction communicated at colleges to those intended for professional life, it is equally valuable to those engaged in mechanical pursuits.

I need not remind you that the prosperity of a country depends upon its industrial interests. Mere brute force is no longer the most powerful. It has been superseded by skilled labor, and the country advances in proportion to the education received by its workmen. I shall refer more particularly to this in my remarks about the South Kensington Museum. I refer to it now only to impress upon you the importance of technical science in every school, not to be content even in the most rural district with imparting a knowledge of the "three R's." I will here give a short extract from a report of the committee appointed by the British House of Commons to investigate the national importance of proper elementary teaching: "The industrial system of the present age is based on the substitution of mechanical for animal power; its development is due in this country to its stores of coal and metallic ores, to our geographical position and temperate climate, and to the unrivaled energy of our people. The acquisition of scientific knowledge has been shown by the witnesses to be only one of the elements of an *industrial education* and of industrial progress. Nearly every witness spoke of the extraordinarily rapid progress of continental nations in manufactures, and attributed that rapidity not to the model workshops, but to the scientific training in France, Switzerland, Belgium and Germany, and to the elementary instruction which is universal among the working population of Switzerland and Germany." I will briefly trace the system adopted by these two countries. I have already told you that Switzerland had school collections representing the three natural kingdoms, with special aids for instruction in natural sciences, exhibited at Philadelphia. At Vienna, too, Switzerland exhibited and received the following complimentary notice from a German newspaper: "Switzerland has succeeded in bringing the great achievements of science into a happy relation with the elementary schools, and thereby with the education of the whole nation. A healthy and beneficial material relation has been established between the university and primary schools, such as is scarcely found elsewhere." I may remark, in passing, that, according to Dr. McCosh's views in a recent address given before this Association, this is what you require in the United States. He says: "The grand educational want of America at the present time is a judiciously scattered body of secondary schools to carry on our brightest youths from what has been commenced in the primary schools, and may be so well completed in our colleges. We need a set of intermediate schools to enable the sober youths of America to take advantage of the education provided in the colleges."

It was very much to be regretted that Germany did not send a national educational exhibit to the Centennial. This country takes a foremost position among the nations of Europe by having introduced practical science as a means of popular education. In Prussia the system embraces three grades of instruction; Primary, Secondary and Superior. The Primary schools are of two kinds, elementary and burgher, or middle school; the first are designed for

the poor, and are sometimes designated free or charity schools. In Germany, with a population of 41,000,000, they have over 1,000 secondary schools for boys, with 12,000 teachers and nearly 200,000 students.

I trust that you will not think this a digression on my part, but I feel anxious to explain my views on the necessity of teaching natural science to the rising generation, and also the importance of pedagogical museums in the education and true advancement of nations.

SCHOOL ARCHITECTURE.

To return to the Ontario Educational Museum. In the year 1850, the Chief Superintendent, Dr. Ryerson, was authorized by act of Parliament "to expend a sum not exceeding £200 in any one year, to procure plans and publications for the improvement of school architecture and practical science in connection with common schools." An act was subsequently passed authorizing the expenditure of a sum not exceeding £500 per annum in the purchase of books, publications, models, and objects suitable for a Canadian Library and Museum to be kept at the Normal School buildings. An additional sum of £500 was granted for the establishment and support of a School of Art and Design for Upper Canada, to be in connection with the Normal School. With this small amount our Educational Museum was commenced, and I may say, from its inception to the present time it has gradually progressed, so that it now ranks in regard to utility with similar museums in any part of the world. In order to show that good collections can be made with small sums of money, I will refer to a special report of Dr. Ryerson's, published in 1856, in which he says:

"By the provisions of the Acts above mentioned, I have been enabled to introduce publications and plans for the improvement of school architecture into all the municipalities of Upper Canada; to obtain models and instruments and apparatus for teaching and illustrating different branches of natural history and science in the schools; to commence a collection of specimens of the Canadian birds and animals, of the geology and mineralogy of the different provinces of British North America, models of agricultural implements, etc., together with several hundred books, publications and objects relating to education and other departments of science and literature. I have also been anxiously desirous of preparing the way for, and as far as possible, of giving effect to, what was contemplated in connection with the School of Art and Design. The copies of paintings which I have procured, present specimens of the works of the most celebrated masters of the various Italian Schools, as also of the Flemish, Dutch and German. The collection of engravings is much more extensive: but they are not yet framed or prepared for exhibition. The collection of sculpture includes casts of some of the most celebrated statues, ancient and modern, and busts of the most illustrious of the ancient Greeks and Romans, also of sovereigns, statesmen, philosophers, scholars, philanthropists and heroes of Great Britain and France. Likewise a collection of Architectural Casts, illustrating the different styles of architecture, and some of the characteristic ornaments of ancient Gothic and modern architecture."

It may be interesting for you to know the actual number of articles purchased and displayed in such a short time by the indefatigable exertions of Dr. Ryerson. I have therefore prepared a detailed list. In 1856 the Educational Museum of Ontario contained 185 groups, statues and life-sized busts, specimens of sculpture from the antique; 205 modern groups, statues and life-sized busts; 311 small busts; 180 casts of Greek, Roman and Mediæval architectural sculpture; 88 paintings, copies from the Italian schools; 122 paintings, copies from the Dutch and Flemish schools; 8 paintings, copies from the German school; 15 paintings, copies from the French school; 5 paintings, copies from the Spanish school; 600 steel and copper-plate engravings; 120 large lithographs of celebrated paintings; a large number of illustrated books in French, Italian and English; 350 stuffed mammalia, birds, reptiles and fishes; and several cabinets of minerals, rocks, fossils, etc.

In 1859, the grant for School Architecture was raised to $800 per annum, and a sum of $2000 per annum allowed for the purchase of books, specimens, models and objects illustrating the physical resources and artificial productions of Canada, especially in reference to Mineralogy, Zoology, Agriculture and Manufactures (of recent years special grants have been voted for the museum, according to the requirements for each year as reported by the Chief Superintendent of Education).

In 1867, Dr. Hodgins, the present Deputy Minister of Education, proceeded to England and the Paris Exhibition for the purpose of purchasing specimens for the Museum, also to make arrangements with publishers for future supplies of books. Even those acquainted with that gentleman, knowing his usual indefatigable exertions and natural enthusiasm in regard to everything appertaining to the advancement of education, will be surprised at what he accomplished; and those unacquainted with him will be astonished at the large number and variety of specimens illustrating so many branches of Science and Fine Arts procured by the Deputy Minister for a very small sum of money. On his return to Ontario, Dr. Hodgins prepared a report for the Chief Superintendent on the articles he had succeeded in obtaining for the museum, and as that report is written in the Doctor's well-known graphic and lucid style, far superior to any description I could give you, I will here read that part of it referring to the collection he had made.

OBJECTS OF ART, ETC., FOR MUSEUM.

In order to obtain the various objects desired for our Educational Museum, I confined myself chiefly to three sources of supply, (1) the British Museum, (2) the South Kensington Museum of Science and Art, and (3) the French Exhibition at Paris. Several minor collections were also examined, and many useful and interesting objects procured from them, or from private parties.

As already intimated, I devoted several days to a careful examination of the various objects of art, models and apparatus in the Paris Exhibition. Those which I deemed most suited to our purpose, and which I procured, may be grouped under the following heads. A detail of them will be found in the appendix.

I. Models of School Furniture and School Requisites.
II. Scientific Models, Photographs, etc.
III. Specimens of Natural History.

Of these articles I procured all that were for sale, and left orders for several others not then available. Many of the most interesting and striking of the objects selected could not, I regret to say, be procured on any terms—they being either single models made for the Exhibition or for private parties. I was thus unable to procure one-fourth of the articles which I had selected, which accounts for the meagreness of the list of articles procured from Paris.

In the British Museum and in the South Kensington Museum of Science and Art, I found many things of great interest and value for our collection. I had, however, to content myself with making a small, but, I trust, as interesting and varied a selection as the means at my disposal would allow. As some of these articles are of special interest, I will briefly refer to them as follows:—

Assyrian and Egyptian Sculptures.—Of the exceedingly valuable collection of sculptures with which Mr. Layard's explorations at Nineveh have enriched the British Museum, I was

enabled to make choice of several of the most interesting casts authorized by the Museum. The selection includes, I. A colossal, human headed, winged bull; II. A four winged figure with mace; III. Slabs representing (1) Sardanapalus I., with winged human figure and offerings, (2) the eagle headed deity (Nisroch) with mystic offerings, beside the sacred tree, (3) an attendant (eunuch) with bow and arrows, etc., (4) Sardanapalus and army besieging a city, (5) a royal lion hunt, (6) Sardanapalus II. at an altar pouring a libation over dead lions, (7) Sardanapalus III. and his Queen feasting after the lion-hunt, (8) a very striking slab representing a wounded lioness, (9-11) horses, lions, male and female figures; IV. Black obelisk from the great mound set up by Shalmaneser (King of Assyria) about 850 years B. C. I also procured, V. Two most interesting stones (recently added to the British Museum collection) containing records in cuneiform character, etc., of the sale of land, about 1120 B. C.; VI. Large statue of Memnon; VII. Lid of large sarcophagus; VIII. Side of an obelisk from Temple of Thoth (from Cairo), IX. Rosetta stone, with inscription in honor of Ptolemy.

Casts of Gems, Metals, etc.—From a private dealer I procured, (1) a beautiful set of (470) casts of the celebrated Poniatowski gems. (A similar collection I afterwards saw in the Ashmolean Museum, at Oxford.) (2) a set of (170) medals, illustrative of Roman History, the Emperors, etc.; (3) a collection of medals of the Popes; (4) a set of the great seals of England; (5) 38 medals of the Kings of England; (6) 80 of the Kings, etc., of France; 24 of Russian Emperors, etc.; (8) 250 modern celebrated men; (9) besides numerous casts of medallions, Tazza, pieces of armor, etc.; (10) a beautiful collection of casts of leaves, fruit, etc; (11) about 60 busts, life size, of noted modern characters, etc.

Ivory-Carvings, Chromo-Lithographs, Photographs.—From the collection of the Arundel Society, published in connection with the South Kensington Museum, I procured (1) a full set of 150 specimens ivory carvings, of various periods from the second to the sixteenth century, in fictile ivory; (2) 60 chromo-lithographs, beautifully colored, illustrating Italian art; (3) 573 photographs of National portraits, illustrative of English history, including the Tudor period; (4) 400 miscellaneous photographs of objects of art, scenes, etc.; (5) 170 engravings of modern sculpture.

Electrotypes of Art Treasures.—Of the rich and beautiful collection of Elkington and Franchi's electrotypes of art treasures in the South Kensington collection, I was only enabled to make a small selection, owing to the expense of the copies for sale.

Food Anlaysis.—Upon application and explanation of my object, I was enabled to procure from the authorities of the South Kensington Museum, a full set of the printed labels of the numerous samples of Food Analysis exhibited in the Museum. I also procured specimens of the analysis boxes with glass covers, so as to enable us to form a similar collection, on a smaller scale, for our own Museum. This collection, when made, will form a most interesting and instructive study for the farmer and food consumer.

India Rubber Manufactures.—Through the kindness of Messrs. Mackintosh & Co., the eminent India Rubber manufacturers of Manchester, I was enabled to select several interesting specimens of Rubber-work, illustrative of the various uses to which India Rubber is applied. Some of these specimens are highly artistic in design.

Naval Models.—Having made arrangements while in London I have since procured some beautiful models of ships and boats, including a line-of-battle ship and steam vessels.

Miscellaneous.—I also selected quite a number of Greek, Roman and English coins, with a few curiosities and specimens of Natural History, etc. I had wished to obtain some striking photographs of objects and places in India, from the India Office, in London, and models from the National Life-Boat Association, but the state of the funds at my disposal did not admit of their purchase.

You can now form some idea of the extent of our Museum of Fine Arts, which is intended for a School of the Art of Design.

Before describing other Pedagogical Museums, I will briefly refer to the advantages Ontario derives from her Educational Museum and Depository:

1. From its establishment up to the end of 1875, library books to the number of 1,136,130 have been supplied to the schools of that Province, selected from the principal publishers in Great Britain and the United States. These books were submitted to a careful examination by competent judges, and then supplied to the schools at a mere nominal price.

2. The principal maps kept for sale in the Depository are constructed under the direction of the Education Department, and are specially adapted to the requirements of the schools. They are also engraved in Ontario and printed on paper manufactured in the Province.

3. The samples of apparatus, after being selected from the best philosophical instrument makers in Europe and America, after careful examination and, if necessary, improvements in construction, are submitted to tender; and, in consequence of large quantities being ordered, are manufactured at about one-half the cost of the imported instruments.

4. The globes being manufactured in Toronto in large quantities enables us to sell them at lower prices than those at which they have hitherto been sold in any part of the world. Six-inch globes, similar to those sold in England at £1, 10s, are sold at the Depository, full price, for $1.50 each, costing the schools only 75 cents each. In this way we have established and fostered a manufacturing business in Toronto, that it is probable would not have been introduced without the aid of the Department, expending for several years an average of over $20,000 in Toronto. The plan of the Department has been to import nothing that can be made at home, and further to encourage the manufacturers by allowing them to keep a supply of apparatus, made from our models, for sale to private schools, etc.

5. The Museum of Paintings and Sculpture is also of great public benefit; it has created a taste for fine arts; pupils are admitted free of charge to copy the specimens exhibited. By this means quite a number of persons who had a taste for painting have developed their natural ability, and distinguished themselves by their artistic skill. Were I to be asked whether after my twenty-five years of experience in this Department I could suggest any changes in this branch of the Educational Department, my reply would be: Yes. I would add to its powers. I would grant to Mechanics' Institutes, Agricultural Societies, and other institutions receiving Government aid, the same privileges as given to schools. I would also adopt a different system for giving instruction in the use of instruments to teachers. I may state that, at the present time, teachers requiring school apparatus from the Educational Depository, can have their uses explained either by personal interview or by letter. I would improve upon this by adopting the same plan that I successfully carried out for the establishment of Meteorological observations throughout the Province. I personally visited the Grammar schools, and gave instructions to the masters, not leaving until I was satisfied that they sufficiently understood how to take the observations and work out the necessary corrections.

I would do the same in regard to school apparatus by visiting primary and secondary schools at certain centres and giving instructions to the teachers. I would see that each teacher could properly perform a series of experiments in natural science, thus making them experimentalists and practical demonstrators.

Time will not permit me to describe all the pedagogical museums now in operation in different countries, but I will briefly refer to two of them, the South Kensington Museum and the Russian Pedagogical Museum.

SOUTH KENSINGTON MUSEUM.

The British Government first established a school of design in 1838, having for its object the training of designers to improve the patterns and designs for

manufacturers. Branch schools were also opened for promoting the same object, but they were very slow in their progress; only twenty-one of these schools were established in twelve years. Immediately following the expiration of the twelve years, an important event took place in English history. I refer to the International Exhibition of 1851, which, with the succeeding international exhibition, has been the means of compelling every country, desirous of keeping pace with its neighbors, to adopt a system of practical and technical education. Prior to the Exhibition of 1851, the English people, from their great success as a manufacturing nation, considered that they had the most skilled workmen in the world; but they soon learned that the success was not to be attributed to any superior educational knowledge they possessed over other countries, but rather to nature's lavish gifts of coal and iron, and their persevering industry as a manufacturing people. The exhibition enabled them to compare their own workmanship with that of the other nations, and the result to them was very unsatisfactory. They were awakened to the humiliating fact, that with all their natural advantages and the immense wealth they possessed, they could not successfully compete with some other countries in articles requiring skilled labor. They were surpassed in the very branches of manufactures on which they had prided themselves as a nation, and they at once saw the necessity of training their workmen. Strenuous efforts were made to remedy their deficiency; the government took up the matter and made munificent grants of money. The Privy Council formed a new department, that of science and art, and established the South Kensington Museum in 1852, at a cost of $6,000,000, with an annual grant of $500,000, and connected the Schools of Design with that institution; but with all this, the race "was not to the strong." At the next exhibition, which was held in Paris in 1855, England did certainly show improvements in the design of her pottery and glass. The old blue earthenware plates, embellished with the traditionary history of China and ridiculous figures of the Chinese exhibited in so many wonderful contortions, which excited the amazement of English childhood, were gradually improved upon. Schools of art had been established in the manufacturing counties, and special teachers were trained for giving instruction in these branches. But what did England find in regard to her other manufactures? That other countries, especially France and Germany, were making rapid strides in advance of them in the manufacture of iron and steel.

These countries had also received an important lesson in 1851. They found that England held supremacy by her natural wealth; that there would be no chance of their competition against her in raw material or mere common labor and mechanical power. Their only remedy would be to economize labor and enhance the value of the material by skilled workmanship. They accomplished this by establishing schools for educating and training workmen in every town and centre of industry. This enabled them in 1855 to surpass England in their great staple manufactures of iron and machinery.

Although this was humiliating to the English educated people, it had no immediate effect on the English manufacturers. They, unfortunately, despised their rivals by supposing that the articles exhibited were specially prepared for the Exhibition; and it was not until 1862 that they were really awakened to the necessity of some national exertion to advance the interests of the manufacturing community, in order for them to keep pace with the rapid progress of rival nations. The old idea hitherto believed in by Englishmen, that one of them was equal, either in physical, intellectual or scientific attainments, to five Frenchmen, or three of any other nation, became exploded.

The nation became aroused; they were not satisfied with the establishment of the South Kensington Museum. Other institutions were affiliated to it; the whole country became aware of its importance; a taste for fine arts was cultivated; institutions were opened for imparting scientific knowledge, and the result was satisfactory. It revolutionized the whole country in regard to scientific education.

The South Kensington Museum contains several collections, to which I will briefly refer:

1. The Museum of Ornamental Art as applied to manufactures, formerly contained at Marlborough House, the present residence of H. R. H., the Prince of Wales, was removed to the iron building in the South Kensington Museum in 1857. It comprises over 20,000, objects, illustrative of ancient, mediæval and modern art and workmanship of various countries; also, a very large collection of reproductions of objects in other national collections; these are produced either by the electrotype process or by castings in plaster.

2. The National Art Library contains 33,000 volumes, 10,000 drawings, 23,000 engravings, and 36,000 photographs, all relating to Ornamental Art. The books were nearly all selected by competent judges appointed specially for that purpose.

3. Collection of British Pictures, Sculpture and Engravings was commenced by the presentation of Mr. Sheepshanks' private collections of paintings, valued at £53,000, to the nation. It now consists of 585 oil paintings, and upwards of 1,000 water-color drawings.

4. A collection of sculpture, chiefly decorative, in terra cotta, stone and marble.

5. The Educational Collection, with models and appliances for scholastic education, contains 20,000 volumes of educational books, and several thousand specimens of models and appliances for educational purposes.

6. Collection of Materials and Metals for Building and Construction. This comprises samples of wood, building stones, bricks, cements, etc., used for building purposes.

7. The Food Collection, containing substances used as food, showing their natural sources; also, their chemical composition.

8. Reproduction of Electrotypes of Art Objects in other Museums. These are produced by means of casting, electrotyping, photographing, etc., and are used for Art Schools connected with the Museum.

9. Collection of Naval Models, with appliances for modern warfare.

The entire museum, to the end of 1874, is said to have cost the nation £1,191,709, 17s., 4d. In addition, several valuable collections have been presented by private individuals.

The museum has in connection with it 2085 Schools of Art. These are supplied at certain intervals through a circulating medium with reproductions of the principal objects, some of which are allowed to remain for a period of one year or more. The parent Institute also assists in holding exhibitions in different parts of the country. Since 1864, 245 exhibitions have been held, which have been attended by over 5,000,000 visitors. The British Government also grants pecuniary assistance to teachers at a distance to visit the Museum in London.

I regret that time will not allow me to enter more fully into a description of the work done by this magnificent institution, which was produced through the influence of England's first International Exhibition. I trust, however, I may have the pleasure, next year, of personally accompanying many present to the South Kensington Museum, when they will be enabled to judge for themselves of the grand educational work it is now accomplishing.

RUSSIAN PEDAGOGICAL MUSEUM.

I shall now give a short sketch of the Pedagogical Museum of Russia.

When serfdom existed in Russia, the land-owners objected to the education of the peasant on the ground that it made him discontented with his lot; but as soon as this barrier was removed, the Russian peasant showed an eagerness to improve his mental condition, and grasp all the rudiments of education that have been brought within his reach. This desire was to a certain extent gratified by the publication of an immense number of standard books and periodicals; for the lower classes in Russia are great readers. Kohl, in his work "Russia and the Russians," says: "If anything in St. Petersburg excites the astonishment of foreigners, it is the extraordinary fondness for reading now observable among the Russian servants. Most of the antechambers of Petersburg grandees, where part of the servants are assembled, look like absolute reading rooms; all of them being engaged with some book or other. It is no uncommon thing to find six or eight of them in different corners of the rooms absorbed in their books; and if this sign of a growing desire for knowledge astonishes the foreigner, who expected to find here nothing but barbarism, sloth and ignorance, he will be more astonished if he takes the trouble to examine the subjects of the works they are reading. One servant had studied a voluminous system of mathematics, and likewise a complete system of algebra, and drawn most of the figures on scraps of paper. When you examine the book-shelves of these people in their dark rooms, you are surprised to find what the activity of their acquisitive minds has led them to bring together. Part of a Bible lies beside a translation of the Iliad, and a book published by the Synod by a work of Voltaire's. Even the passports of the Russian servants show that in one branch of knowledge they surpass other countries, for after the usual particulars, as to features, etc., we almost invariably find that he speaks "Russian, French, German, English and Turkish." A still further proof of the Russian's desire for learning is the fact that a book was found in the knapsack of nearly every soldier that was left dead or wounded on the field of battle during the Crimean war.

It is not surprising to find that the authorities are now providing means to gratify this great desire for learning. In a pamphlet on the Pedagogical Museum of Russia, issued at Philadelphia, we read that "a plan and system of public readings" have been worked out for the uneducated classes, and upwards of 500,000 pamphlets of these readings have been published. A plan of similar readings for private soldiers is now being worked out.

Soon after the emancipation of the serfs in 1861, they began to establish primary schools, and before long they had 10,000 schools in operation. The Church vied with the Government in promoting this great work, and the schools rapidly increased. This impetus to popular eduation gave birth to the establishment, in 1864, of the Pedagogical Museum, whose specimens of school apparatus, etc., by their excellence and usefulness, so astonished those interested in the advancement of education at Philadelphia last year. It was at first connected with the interests of the military schools. In 1871, however, it became an independent section of the General Museum of Practical Science of St. Petersburg.

It may not be uninteresting to compare the object of this Museum with that of Ontario. The Pedagogical Museum of Russia has for its object:

1. To collect information regarding the manufacture of school apparatus in Russia and abroad, and to exhibit as complete a selection as possible of contemporary school and educational apparatus, as well of home as of foreign make, with a view of facilitating educational establishments in the choice of proper apparatus suitable to individual requirements.

This is done in Ontario: specimens of school apparatus are kept on exhibition at the Educational Museum, and their comparative prices, merits, etc., explained to intending purchasers.

2. To submit the school apparatus thus collected to special examination and test, in order to ascertain their comparative merits, as well as the best way of applying them to the purpose of instruction and education, and in case of merit to introduce improvements in school apparatus.

This is also done in Ontario: every specimen of school apparatus is carefully tested, and when necessary, improvements are made.

3. To promote the development and reduction in cost of the local manufacture of school furniture.

This is carried out in Russia by inviting manufacturers to compete against one another, the samples being provided them. Here, at the outset, they met with difficulty. They could not at first induce a single manufacturer to undertake the proposed work. They mistrusted the attempt to force apparatus into the schools, and the authorities were compelled to employ prison labor in the manufacture of cheap wooden apparatus for preliminary instruction. After these specimens, however, had been exhibited, there was no difficulty in getting private enterprise to do the required work.

The plan we adopt in Ontario is very different: we get the lowest tender and pay for the articles from the Government Fund. It is, therefore, obvious, that we can sell much cheaper than if left to the competition of tradesmen. A tradesman manufacturing a philosophical instrument for sale, would probably make only five or ten. We might order fifty, thus reducing the price. Further, the tradesman's expenses are such that he would have to add to the price in proportion to the length of time he thought the articles would be kept in stock.

4. To promote the diffusion of pedagogic and educational knowledge by means of the collected school apparatus.

This is done in Russia by exhibiting samples in the Museum and giving information where they can be procured. Our system is to encourage trustees to purchase apparatus at cost price, and giving them one-half toward the payment of these purchases.

It will thus be seen that although Russia is doing a great and good work by her pedagogic museums, Ontario is far ahead in regard to its usefulness, by inducing Trustees to purchase apparatus. There is one thing, however, in which I must give the palm to the Russian authorities; that is, for arranging local exhibitions and bringing together the producers of apparatus and the representatives of school demands. This certainly is a grand scheme. If manufacturers of school apparatus and teachers could at intervals be brought together, such an impetus would be given to the introduction of school apparatus into the schools that there would be no fear for the future about the teaching of practical science. The intelligent teachers of the country need only to be awakened to have their attention directed to its importance, and they will not rest content until their schools are properly supplied with apparatus.

In onclusion, allow me to thank you for your kind attention; and I trust that my remarks may be the means of stimulating the formation of pedagogical museums and depositories in this country, and that the teachers and superintendents will fulfil the grand and noble work entrusted to them in educating the

youth of this country so as to give birth to a prosperity hitherto unknown among nations; and may they grow up under your guidance and instruction so as to become the admiration of the whole world, not only as an intellectual, commercial and manufacturing nation, but as an independent and God-fearing people.

Trio by Misses Sevin and Miss Grossman, of the Erie public schools.

Dr. Wickersham said that, though it was not usual for the Association to tender a vote of thanks to those who addressed it, in this case the gentleman had come from another country—a younger child of the same good old mother England—and had given us an exceptionally valuable and practical paper. He felt that the United States,and Pennsylvania especially, owe a debt of gratitude to the Province of Ontario for the magnificent display she made at the Exhibition last year, in agriculture, mechanics, and notably in education. American educators were amazed at its completeness and variety; and were indebted to the gentleman who has just addressed us, for its arrangment and for many kind attentions. This paper treats of a practical question of to-day—how to supply our schools with proper apparatus. Just here is one of our great wants, in every grade, from common school to college. We must not remain behind in this matter. All over Europe these educational museums are in operation, and we must not allow our boasted system of free education to be distanced by other nations. He moved that a vote of thanks be tendered Dr. May for bringing this practical question before the Association, which was unanimously agreed to.

EXCURSION TO PARIS.

Dr. May responded, saying that he was fully in sympathy with the Association, and would gladly give Pennsylvania educators the benefit of any results of his experience. He wished to say before leaving us that, having been appointed to represent the English-speaking people of Canada at the Paris Exposition of 1878, he intended arranging an excursion of Canada teachers to Paris, in which members of the Association were cordially invited to participate. He would meet the excursionists at Liverpool and conduct them through the South Kensington Museum, the British Museum, and other places of interest in London, thence to Paris, and after visiting the Exposition, return and spend a week in England, perhaps visit Edinburgh and Dublin before returning. He had no doubt the educational people of England would receive the Americans as cordially as the Canadians were met at Philadelphia last year. The whole expense, including two weeks admission to the Exposition, will probably not exceed $250, and may be less. He hoped many of those present would go, and thus give him the opportunity to reciprocate, at Paris, the kindness shown him at Philadelphia.

Adjourned to 9 a. m. to-morrow.

WEDNESDAY MORNING.

SESSION opened with music—"I Will Never Leave Thee."

Supt. Jones read part of the 15th chapter of Proverbs, and offered prayer.

EXCURSION TO PARIS.

Supt. Buehrle moved that a committee of five be appointed to consider the subject of a teachers' excursion to Paris, next year, during the Exposition.

Dr. Wickersham said there was a project on foot in the National Teachers' Association having reference to several excursions to Paris next summer during the Exposition. All movements in that direction have been crippled by the delay of the government to make provision for the representation of this country there. The French recognize only nations, and it is expected that action will be taken at the coming session of Congress. We should hardly feel like going there as a body of Americans, if America had no part in the Exposition: after what France did at Philadelphia, we should feel ashamed of our country's absence. As chairman of the committee of the National Association, he had corresponded with the Cook excursion firm, also with Dr. Loomis, on this subject. Arrangements can be made for trips including various parts of Europe, at reasonable rates. Dr. Loomis is anxious to take over a body of teachers on an excursion including two or three weeks at Paris, and a trip through Switzerland, Italy, Germany, the Rhine, and England, and puts the cost at about $300. These excursions would be carried over the route in parties of fifty. A letter from Prof. Northrop, at Paris, says the grounds and buildings are very fine, there is great enthusiasm, and the Exposition will be a grand affair. Hotel and boarding-house rates average about the same in Paris as in Philadelphia. Such a

trip will vastly increase the professional knowledge of any live teacher. He had learned so much himself at the Exhibition last year that he hoped many would take advantage of this opportunity. It might be better to take no definite action at this time, as the subject is to be taken up at Louisville.

Dr. Hays thought it better to take action here and forward notice of it to Louisville, by way of calling special attention to the subject. Let the committee have general powers to co-operate with whatever action shall be taken, without definite instructions. The State Superintendent should be at the head of the committee.

Dr. Wickersham said as he was already chairman of the committee of the National Association, it would be better to appoint some one else here.

The motion to appoint a committee was agreed to.

DISCUSSION: HIGHER EDUCATION.

The discussion of Higher Education was resumed.

Prof. H. C. Missimer, of Erie: Some statements had been made in the discussion of yesterday which contained more assumption than fact. It was said that in the more noted schools a poor man was made to feel his poverty as a degradation. Speaking from four years experience in Yale, he was prepared to say that nowhere was there less snobbery than in that institution. Genius and talent are recognized and respected wherever found. The Doctor who could not see the difference between a small class of thirty, and a large class of one hundred and fifty divided into sections, overlooked the fact that in the larger institutions the division is based on scholarship; what better incentive could one have? Then the management of a great institution of learning, like that of a great business, requires great capacity for organization at its head; and the fact that such men *are* at the head creates a wholesome atmosphere, reaching even beyond the personal contact. There is another advantage in large numbers; a man has a wider range of comparison whereby to gauge his own value—if too modest, he gains confidence; if too conceited, some of it is knocked out of him. In a small institution, the one man who is brighter than all the others, becomes often so conscious of the fact that his working capacity is spoiled for ten years, until the conceit is taken out of him; if he had been in a large class, the friction with others as bright as he, whould have saved him that time. It is not denied that these smaller colleges greatly benefit their localities; but the advantages of the larger institutions should be fairly represented.

Prof. Maris: Our system is well enough organized up to the high school; there the trouble begins, because there is nothing beyond to work up to; and until a higher grade is provided by the State, there will always be trouble with the High School question. They have no such trouble in Michigan, where the University stands above; there is not a town of three thousand inhabitants that has not its Union school preparing pupils for college, whose diploma admits them to the University. The Board of Regents send out a man every year to visit these schools, and see that they are doing the work they agree to do, and coming up to the University standard. The result is that, although Michigan has but one-third the population of Pennsylvania, she has almost as many pupils preparing for college as we have. Thus the influence of the University works, through these lower schools, the elevation of public sentiment in the whole community. They have no trouble in maintaining their high schools; they employ the best University graduates to teach them, and pay them well. We, in Pennsylvania, have learned that we must depend chiefly upon the public high school to prepare pupils for college; yet we find it difficult to maintain the high schools at all, much less raise their standard. He hoped some State system of higher education would be speedily adopted; it would help the good colleges, and reduce the others to their proper rank of preparatory schools.

Prof. Cooper asked if the relation between the University and High Schools in Michigan, described by Prof. Maris, was prescribed by law.

Dr Hays thought it had not been when first adopted, but had been enacted since. If the schools do not bring up the pupils to the grade, they are no longer recognized.

Supt. G. W. Bartch, of Shenandoah: If any more institutions are to be supported by the State, it would increase the State tax, and probably diminish the school tax in many localities which would be injured thereby. Comparison between Pennsylvania and Michigan on a population basis is not fair. Michigan is an agricultural state throughout; much of Pennsylvania is mining country, where parents are too poor to send

their children to school even when all the books are furnished, much less to college. He thought we had better confine our attention to developing the High School, to do the most good and reach the greatest number.

Supt. H. S. Jones, of Erie: This college and school discussion has never before been conducted with such breadth of view and in such sweetness of spirit in this body. At first, the college men, when they did visit us, looked down into our meetings; now they come in and work with us: then there was distance between us, and no harmony; now we meet each other to construct the link that is to bind us together. In looking at the question, we must not base any calculation on comparison of numbers in college in the past and now; then we had not our large underground population, who do not go to college, as a gentleman has said; and when this and other circumstances are taken into account, it will be found that not less but more young people, from the population of the same grade, go to college now than in any past time. We are growing; but it takes time to lift a whole people, especially with the immigration we have to contend with.

Miss Elizabeth Lloyd said that, although not so well versed in the status of colleges, everybody knows that some are better than others. Cannot the State do something towards equalizing the standard of these institutions, by a State Board of Examination or otherwise, and thus prevent these small affairs from calling themselves colleges and conferring worthless degrees? With regard to High Schools, while in some parts the question seems to be whether they should be continued, in others it is, shall they be commenced in every township? We need an agitation of this question that will convince our people that township High Schools are economy, and not extravagance. When we have secured the High School, then we want institutions, if not supported at least recognized and graded by the State, so that we may know that they *are* colleges.

Mr. A. B. Dunning, Jr., thought we might profitably adopt a plan similar to that of the University of New York, where the Board of Regents prepare a series of questions for examination of teachers, on passing which they receive a certificate entitling them to teach in all the schools.

A lady remarked that the questions were sometimes misused, being obtained in advance and classes drilled upon them in some cases, the questions being printed and used in different cities.

Mr. Dunning: The examinations are all held on the same day throughout the State; the questions are sent sealed to a disinterested committee, and not opened and distributed until the pupils are seated for examination.

Mr. G. Williams: The Regents' Questions are not printed until *after* they are used for examination purposes, and are changed each term. They are made at Albany a few days before the examinations, and there is no chance for collusion. Ten years experience proves this plan to be a good one for securing a fair examination and comparison.

Dr. Wickersham wished to say that he believed the High Schools of Pennsylvania were in no danger from the present agitation; they are multiplying constantly, and not one has thus far been abolished, notwithstanding the opposition made. It is a fact, besides, that as many young men and ladies in this State go to college, in proportion to population, as in any other State in the Union, even Michigan; and there are as many coming into the State to attend our colleges as there are going out to those of other States. He appreciated Harvard and Yale, and was glad to see young men go there; but on investigation, we find that as many distinguished men have been made in the little colleges of Pennsylvania as in those larger schools; we cultivate character and make *men*. For example, he referred to the roll of honor exhibited by Washington and Jefferson at the Centennial. He hoped that we should one day plant here an institution of the grade of Harvard and Yale, or even higher; but let us not fail to do justice to those we have.

Miss L. E. Patridge, Philadelphia, did not know where provision was made for girls in our colleges. A few women have slipped in through the back gate of the University at Philadelphia, to be sure; but besides that, she knew of no opportunity for a girl to get a higher education than the High School gives; even that is denied her in Philadelphia, where they gave her a Normal School as the best they could afford—and then had to use the argument that by teaching the girls how to teach the smaller boys, they would, in this manner, pay for their education.

Dr. Wickersham said four or five of our colleges are now open to girls, and the others soon would be.

STATE AID TO HIGH SCHOOLS.

Supt. Buehrle offered the following resolutions, which if carried into effect would enable us to know what a High School is, and would supply the missing link between the common school and the college:

Resolved, That it is the sense of this Association that the State authorities should provide a uniform course of studies for public High Schools.

Resolved, That such High Schools should then receive a State appropriation in proportion to the number of pupils attending.

On motion of Supt. W. H. Kain, of York, the consideration of the resolutions was postponed, to be called up at the discretion of the Executive Committee.

After a short recess, Miss Jennie E. Leonard of Indiana Normal School, read a paper prepared by Prof. D. M. Sensenig, on "Resolutions laid over at West Chester."

PAPER ON RESOLUTIONS LAID OVER AT WEST CHESTER.

D. M. SENSENIG.

"*Resolved*, That, in the opinion of this Association, the teaching of Mental and Written Arithmetic should be conducted as one and only one branch in our schools.

"*Resolved*, That each subject or principle should be introduced with oral instruction on the part of the teachers, setting forth the subject plainly, to be followed with written exercises on the same subject; and that works on Arithmetic should be arranged after this manner.

"*Resolved*, That it is not wise to attempt to finish Arithmetic, as a branch of Common School study, without at least giving instruction in primary algebra and illustrative geometry."

These resolutions appear to point out a new method of treating Arithmetic in our Common Schools. The first favors a combination of Mental and Written Arithmetic, and the other two set forth a method of teaching Arithmetic in conformity with such a combination.

There seems to be an almost universal opinion among superintendents and teachers that too much time is allotted to the study of Arithmetic in our schools; that other branches of equal importance are, in consequence, crowded out; and that the principal source of this evil lies with the present arrangement of the subject matter in our text-books on Arithmetic. A new treatment of the subject, it is thought, should be adopted that will remedy this defect, and that will produce better results in the class-room; but just what the features of this new treatment shall be seems to be the difficult problem to solve.

Some who have always opposed the study of Mental Arithmetic, either because they have persistently refused to examine into the merits of its claims, or because they have regarded it as an innovation upon the old methods by which they were taught, propose the entire rejection of it from our schools, meanwhile pronouncing it a total failure, or a *humbug*, in education. Others, who have themselves reaped incalculable benefit from the study of Arithmetic by this method, and who have successfully taught it for a number of years, feeling very reluctant to give it up as a separate branch, propose, as a remedy, the rejection of certain classes of examples, algebraic in character, from our books on Mental Arithmetic, and certain unimportant subjects from our works on Written Arithmetic; thus diminishing the quantity without impairing the quality of our instruction. A third class, who believe in as extensive a culture in Arithmetic as time and circumstances will permit, without infringing upon the claims of other important branches of study, propose a judicious combination of the Mental and Written methods, thereby enabling teachers to effect the very best results, in both knowledge and culture, in the least possible amount of time. Still another class, and I trust a small one, one-sided in their opinions either from want of an appreciation of other forms of knowledge, or because of self-interest in the publication of text-books, see no reason for any change in the present system of teaching Arithmetic. "It is good enough," they say; "let it alone."

Without entering, moreover, into a discussion of the opinions of any class of teachers, or in defence of my own plan, permit me to present, for your consideration the synopsis of a treatment which, in my opinion, would remedy many of the defects of the present system, and would lay the foundation for new and improved methods of teaching this important branch of learning.

THE NEW TREATMENT OF ARITHMETIC.

Principal Features.

1. Mental and Written Arithmetic should be combined and taught as a single branch. They are not separate departments of Arithmetic, but simply represent two distinct methods of teaching.

2. Instruction in Arithmetic should be topical. In primary classes without, but in advanced classes with, a text-book. A topic in arithmetic may be a fundamental idea, a fundamental principle, a method of operation, a method of proof, or an application of a rule. Only one of these should be taken up at a time, and pupils should receive drill in it just as far as they can comprehend it, and no further.

3. Methods of teaching Arithmetic should be based on the following principles:

(*a*) First the idea and then its application.
(*b*) From the concrete to the abstract.
(*c*) First the *how* and then the *why*.
(*d*) First the elements of the *art*, then the science, after which the completion of the art.

In the application of these principles, the teacher must be controlled by the nature of the topic and the capacity of his pupils.

4. Instruction in Arithmetic should be given in the following order:

(*a*) Each general subject should be introduced by an inductive exercise, leading the pupils step by step to the comprehension of the fundamental ideas and fundamental principles. This will require, on the part of the teacher, a careful and systematic arrangement of a series of properly-graded questions, to be answered orally by the pupils. What apparatus and work upon the blackboard is needed the teacher must furnish.

(*b*) The second class of exercises should present a series of well-graded examples, involving the fundamental ideas and fundamental principles in a concrete form, embodying small numbers, to be worked mentally, in conformity with a good solution given as a model either by the teacher or in the text-book.

The object of these exercises is sufficiently obvious

without any comment. Pupils need guides in thought and in expression.

(*c*) The third class of exercises should present a series of well-graded abstract examples, intended to secure skill in operation, to be worked on the slate or the blackboard in conformity with approved models, and in accordance with the best methods.

Pupils should be required to do their work neatly, and to tell in a concise form how they performed the operation. They should not be required to give the reasons for the various steps in the operation. Much time is often wasted in attempting to teach the science of pure arithmetic before pupils are capable of comprehending it. At this stage pupils should also be taught the various methods of proof, and should be required to employ them. Demonstrations of them, however, should be omitted.

(*d*) The fourth class of exercises should present a series of well-graded concrete examples, involving the ideas, principles and methods of operation thus far taught, embodying larger numbers, to be worked on the slate or blackboard, and explained according to an approved form of solution.

Originality in thought and in forms of expression should be encouraged; but until the pupils can improve upon the forms adopted, they should not be allowed to indulge too freely in forms of their own invention. Careless forms of expression lead to looseness in habits of thought.

(*e*) The fifth class of exercises should present all the definitions, principles and rules of operation, arranged in a logical order, together with appropriate illustrations and clear, concise demonstrations.

This step comprehends the Science of Arithmetic and should be taken only when the pupils have completed the subject of Arithmetic through the preceding steps, and after having obtained some knowledge of the equation and of the elements of Geometry. This step would do very well for the second part of a text-book in which the preceding lessons would form the first part. A few carefully selected examples should accompany the treatment of each separate topic.

(*f*) The sixth class of exercises should present a series of well-selected miscellaneous test-examples, practical in character, embodying a combination of the various definitions, principles and rules comprehended in the Science of Arithmetic.

This should be the concluding chapter in the text-book used in our Common Schools. Examples should be so arranged that parts of lessons could be solved by Mental Arithmetic and parts by Written Arithmetic.

Advantages of the New Treatment.

1. It would diminish the number of classes in Arithmetic, and hence would give more time for such important branches of study as Drawing, Literature, and the Elements of the Natural Sciences.

2. It would give a large number of pupils who can attend the schools for only a few sessions, an opportunity to obtain a good practical knowledge of Arithmetic without studying formal definitions, principles and rules of operation, which they have not the culture to comprehend.

3. It would enable an author to present the whole subject of Arithmetic in one book, of no larger dimensions than the ordinary common-school Written Arithmetic of the present day.

4. It would be methodical and complete, without resorting to the constant repetition of subjects deemed necessary by the present system of treatment in a series of text-books.

Requirements of the New Treatment.

1. A re-arrangement of the subject matter of our text-books.

2. Competent teachers to give elementary instruction according to this method.

3. A better classification of our schools.

4. Better apparatus to give elementary instruction in numbers and in operations.

5. A better appreciation of the practical wants of our Common Schools on the part of educators.

Respectfully submitted to the consideration of the Association of Teachers, at Erie, Pa., with the regrets of the writer that he cannot unite with them in the discussion of the ideas therein set forth, on account of other duties.

Prof. Andrew H. Caughey, of Lafayette College, read a paper upon "The Teacher's Personal Culture."

TEACHER'S PERSONAL CULTURE.

A. H. CAUGHEY.

THE personal character of the teacher is the most important factor in the school. What he is in temper, in morals, in will, in habits of life, in personal bearing, and in general culture, cannot but make a deep and lasting impression upon the minds of his pupils, largely directing and influencing their future lives. Parents and home hold, of course, the first place of influence in forming character; but the teacher who is true to his duty and his opportunities, holds the next. It is not enough that he be a thorough scholar, and have a clear understanding of what he undertakes to teach; or that he be "apt to teach," and able to adapt his instructions to the varied capacities of his pupils. All this, of course, if he is to be a teacher at all. But behind, and embracing all these qualifications—which may be merely perfunctory, of the nature of machine work—there must be feeling, and earnestness of purpose, and a sense of moral responsibility; with all that constitutes true manliness or womanliness, trained and cultivated and thoroughly equipped for the constant demands of this vitally-important vocation.

For what is the purpose of a school? Is it that the pupils may have their minds stored with the facts of science and history? that they may be taught mathematics, may learn language and how to use it, and become acquainted with and know how to appreciate and enjoy the best literature of their own and other tongues? All this, indeed, they are to learn, with all that makes up the sum of a general scientific and literary education. But is not the purpose of our schools, their ultimate and most important end, to form and train our sons and daughters into men and women of vigorous and upright character, ready and able to discharge all the duties of virtuous and enlightened citizens of a free republic?

Surely, it is for this end that a system of general education has been established. Else, why does the State take up the work? The preparation, culture and character of the teacher, then, should be such as to accomplish most fully the purpose of the school—securing not only sound learning and literary cultivation to our children, but inculcating virtuous principles, and training them in the path of an upright life.

Two things I shall take for granted in this discussion: First, that the teacher has a thorough and commanding acquaintance with the branches of learning which he undertakes to teach. Second, that he has entered upon teaching as his profession, his life business, and not as a mere make-shift with which to occupy his time and put money in his purse while he is settling in his mind what profession or business he shall choose, or having chosen it, is making the necessary preparation for it.

Being then a scholar competent to teach, and a teacher devoted to his work, the question is, "What shall be the teacher's further personal culture?" What shall he do, and how shall he train himself, so as to become still more thoroughly qualified for his work, and also for bearing his proper part as a citizen of the Republic, an active member of society, a felt factor in the world's progress? Personal culture; manly, womanly culture; the training and cultivation of one who has so much to do both in laying the foundation and in building the noble and stately superstructure of society—this is my theme.

And I begin with the proposition that the teacher should be a man of high moral principle and of blameless life. Religion he is not called upon to teach; nor is it to be counted a necessary qualification for his position that he be a devoted and active Christian, though such a character has rarely been considered a disqualification. "What I want," said Dr. Arnold, of Rugby, speaking of the kind of man he wanted as a teacher, "what I want is a Christian and a gentleman, an active man, and one who has common sense and understands boys." But whether professedly a Christian man or not, the teacher, like the religious pastor, ought to be "an ensample to the flock." Patience, self-control, truthfulness, politeness, self-sacrifice, sincerity—indeed what noble Christian virtue must not be possessed and constantly cultivated by the true teacher? He needs all for the success of his work; he especially needs all because of the mighty influence his own character and life exert upon his pupils. What! Can a man of evil prniciples and vicious life be daily, for many hours daily, through a period of years, among boys and girls, with their quick perceptions and active memories, and yet, even without conscious intent of evil on his part, work no contamination of their character? And must not the teacher of pure and upright life have equally an *influence for good* on his pupils?

The teacher, then, ought always to strive to be that highest type of man, the Christian gentleman; and this he can be, not merely by attaching himself to some Christian communion and by studying books of politeness and etiquette, but by putting in practice, both in deed and speech—and this when away from his scholars as well as when in their presence—all the virtues of a vigorous Christian character.

There has much been said of late about having the Bible, whether as a text-book or a book of devotion, in our schools. There appear to be great apprehensions lest somebody's *conscience* shall be offended, and lest, perchance, some child of non-Christian parents should be misled into Christian and pious ways. But whether the Book go or remain, they are few indeed who will object to that teacher who consistently adjusts his life and squares his conduct by the pure morality of the Bible. Nay, he has always proved the most acceptable and successful teacher who, "maintaining a conscience void of offence towards God and towards men," devotes himself unselfishly, according to the New Testament model, to his work. With such a living example of the wisdom and worth of the Bible before them, perhaps the omission of the occasional reading of the Bible in the presence of our children may not be greatly regretted. If the living man is an "epistle known and read of all men," the actual perusal of the Epistles of Paul or of John may be dispensed with in the school.

But the teacher ought also, as an American citizen, to be a politician. Do not be startled at the unsavory and disreputable word. What I mean is, that every intelligent man and woman, and especially every one who undertakes to be the instructor of those who in a few years are to be citizens and rulers of this free and vast country, ought to be thoroughly acquainted with the history, mode of government, and general polity, of the nation. Patriotism, one of the noblest of virtues, is often a rude and unreasoning sentiment, a mere instinct. When its cry is, "Our country right or wrong!" "Our country against the world!" it is composed of about equal parts of selfishness and domineering pride. But there is a patriotism which is something better than a mere blind devotion to one's native land. It is that intelligent love of country which all true citizens should possess. Ought not every teacher, then, to be—well, not a *politician*; for, I think, we shall have to give up that word; it has become depraved, demoralized, gone to keep company with *demagogue*, which also had once a fair character—not a politician, then, but an educated and thoughtful patriot, knowing his country's history, her needs, her true glory, her polity and her laws, so that he may be able to serve her faithfully if called among her councillors or defenders, and to inculcate all this knowledge in his pupils, and inspire them with a portion of his own spirit. He need not be a partisan, nay, he ought not to be a partisan, in his school. Just as he may be an upright Christian man, and teach his pupils and lead them towards all that is pure and upright and manly, without letting them discover whether he is Episcopalian or Lutheran, Methodist, Presbyterian, or Roman Catholic; so he may be such a patriot as I have described, imparting to his pupils much political instruction, and stimulating them by his own example to become wise and ardent lovers of their country, without it ever appearing to them that he is a Democrat or Republican, or Inflationist, or Woman's Rights' man.

And is it not the part of the teacher, more than of any other person—more his than the parent's, or preacher's, or political editor's—to control and guide that ardent zeal for country and flag, and that enthusiasm and pride in the glorious deeds and triumphs of our ancestors, which are accustomed to blaze forth in patriotic recitations on the school rostrum? Self-culture here—an enlightened acquaintance with the history of his own and other nations, and the discriminating judgment to point out the mistakes and weaknesses, as well as the glories and proud achievements of his country—will qualify the teacher, while not quenching or smothering the sentiment of a true love of liberty and of country in the breasts of his pupils, so to train and lead them that they shall grow up into enlightened, courageous and useful citizens.

Would not even a single generation of such teachers, moved not by partisanship, but by intelligent views of right and duty, and indoctrinated with sound principles of political action, go far towards delivering our people from that wild craze of excitement into which they are plunged by the quadrennial return of our great national election?

The teacher has also an important part to act in the community, regarded in its social aspects. Too often he isolates himself. His books and school make up his entire world. He goes to the church, indeed, as a silent listener. His reading and interest as a voter and citizen may have even fitted and inclined him to take part in political affairs, as I have endeavored to show he ought to do. But he should also have a *social* life, and qualify himself for its duties and pleasures; and for this he needs training and experience. Scholars and literary men often make a great mistake in neglecting to cultivate the social side of their character.

Some people seem to be born talkers. They go astray from their infancy, talking, talking, talking. But it is one thing to be a great and endless talker, and quite another thing to be socially a fine or a brilliant conversationist, or still better, a wise, agreeable, self-poised, and always welcome member of the social circle. The latter is never called a *great talker*. He may be more than ordinarily gifted in the use of language, and is always endowed with good common sense and the power of self-control; but social qualities are mainly matters of training and cultivation. And who more than the teacher needs to have this social culture? His relations to his pupils and their parents demand it of him; and the fact that he is by his profession one of the controlling and moulding forces in society, makes it his duty to qualify himself well for his important position.

But the general intellectual culture of ihe teacher, rather than his moral character and his qualifications as an enlightened and patriotic citizen and member of society, is doubtless the subject that the title of this paper has suggested to most of us. And here, as in the previous part of the discussion, will you allow me to consider that the culture intended is mainly that which the teacher acquires for himself after he has entered upon his work? The more thoroughly he has been previously trained, indeed, for his responsible duties, and the larger his mental acquisitions, so much the better. But he will be the better teacher should he have a low opinion of his acquirements and qualifications, however considerable they may be, than that he should regard himself as wise and learned—"rich and increased" in knowledge, "having need of nothing." In the former case there will be promise of constant activity and growth, with that eager thirst for knowledge which cannot be appeased; in the latter, a stolid or self-satisfied contentment with what he is.

Shallowness, with self-conceit, has been called, and I fear but too justly, our great American fault. But deeper draughts of the Pierian spring generally effect a cure. As our knowledge is enlarged, as we become more widely acquainted with the world, and understand our own powers and acquisitions as compared with those of others more definitely, our vanity diminishes. And when one has become truly learned and has attempted to fathom some of the great depths and to scale some of the measureless heights of science and philosophy, he is willing to acknowledge with Newton that he knows but little, and that an infinite stretch of undiscovered truth lies still before him.

As the world of knowledge is exhaustless, and as the culture resulting from its acquisition and assimilation is constant; so the teacher is to regard himself as entered upon a boundless field of exploration, an endless campaign of conquest. He is to find no place where he can sit down and rest. There will be no time when he may be allowed to say, with Israel's great king and philosopher, bored with disgust and *ennui*, "All study is weariness of the flesh."

But when we enter upon a course of intellectual culture and furnishing, it is well to understand at once that we cannot know everything that is worth knowing, and that we cannot read all the books that are well worth reading. We must select and reject. Like the mariner, we must lay our course and adhere to it steadily, or else drift aimlessly and never reach port. In this we must be largely influenced by our own taste, by "natural selection," as it were, but especially by the demands of our work. That is to say, while we study or read that to which our taste and habits of thought lead us, we ought usually to follow such lines of reading and inquiry as will be most serviceable to us as teachers.

But in securing our best personal culture, and at the same time our most efficient qualification as teachers, what *kind* of reading shall we choose? Let us consider this point briefly.

In these days of the great development of Science, when "ologies" and "ographies" are reckoned by the score; when "the torch-bearers of discovery are pushing forward with intrepid assiduity," and when practical scientists are penetrating the mysteries of nature above and beneath and around us, and bringing to light facts and principles that have been hidden from all the past ages; when, by our own observation, and from every newspaper and periodical that we take into our hands, we are all constantly learning so much about life, and the modes of existence, and the laws that govern the forms and relations of matter—all of it interesting, and much of it most useful knowledge—ought we not still to remember that the human race and its history and development; the laws of the growth and decay of nations, with their governments and their achievements; the origin, growth, and correlation of languages, with their literatures and the immortal works of genius crystalized in them—ought we not to think that these departments of learning and investigation are still most worthy of our attention, and not to be pushed aside that we may know something more of the composition of a stone, or to determine which of the millions of fixed stars is nearest the earth, or ascertain the exact point where the fossiliferous rocks end and the azoic begin? The study of the history of men, then, in their governments, literature and religion, their wars, their arts, and their material and intellectual progress, and the comparison of these with our own times and civilizatation, ought to hold a foremost place in our studies and readings; and will prove, to the thoughtful teacher, a means of culture that will tell positively and directly upon his professional efficiency.

"The proper study of mankind is man," and this certainly as much in his *intellectual development*, as in his physical origin and descent. What man is, what man has done, what man is capable of doing and becoming, how progress may be made towards a higher and nobler civilization; these are great questions for all to study, problems that can be solved only by patient and persistent investigation. And who more than the teacher should be constantly devoting himself to these studies and inquiries? He, like all men of thought and learning, has the world of all the past to tell him what has been done or attempted, and the world of the present, in which divers theories are being put to the test, and thousands of empirics are carrying on their experiments. He has what others

have not, his own little world of many boys and girls, with their many minds and tempers, whom with thoughtful and conscientious effort, and with all of the ability and knowledge he can command, he may strive to instruct, educate and train towards his own highest ideal of the best men and women.

Is there not, then, to the teacher, a wide range for self-culture in the study of the history of the civilized nations, ancient and modern, and enriching his mind with the vast treasures of their best literature? Here, indeed, is the great source of this intellectual cultivation, if only his reading and study are with method and to a purpose. Mere reading, without selection of subjects and authors, and without taking pains to lay up in our memories what we read that we count valuable, or without marking or indexing important passages in a convenient way for future reference; such *random reading*, without thought or purpose, however extended it may be, is of very little profit. True, to be in contact daily and often with the productions of great and originating minds, cannot but result in some good, though the contact be careless and slight. But the benefit obtained by attentive and reiterated reading or study, with an after skimming of the cream—the marked or annotated passages—is infinitely greater. A few choice books, thoroughly read and re-read, often accomplish more for mental culture, and even for fullness of thought and information, than a thousand books, however good, run through with the rapid dispatch of a single reading.

But the trouble is that much of our reading is not of the best literature, but too often that of the flippant periodical or the ephemeral book, the hasty and half-digested thoughts of people no wiser than ourselves. Such productions are easily and cheaply at hand; and there is a certain interest in them, and a fascination, that it is hard to disregard. But the temptation must be resolutely and vigorously resisted if we would not become, as thousands do, mere slaves to news and novel reading. Most reading of this kind—of course I refer especially to the inferior class of fictions—does not create culture, but the reverse. It not only wastes valuable time, but forms a vicious taste both in sentiment and style. The mind becomes simply a receptacle of the weak rinsings of active, but immature and untrained imaginations. There is little advantage in reading merely that which pleases with its beautiful sentiments, and the aptness and smoothness of its fine phrases, or with the strange and exciting incidents that it relates. Books that set us to thinking and writing and doing, that stimulate and invigorate us, that make us strong for duty, and firm to resist temptations and evil tendencies—these are the books that it is worth while for us to employ our time in reading. The light and dainty, or the thrilling and exciting, literature of the fashionable novel affords a kind of sparkling pleasure and exhilaration. In fact, there is in such reading a luxury of half sensual, half intellectual pleasure, that multitudes of men and women, young and old, who seem to have nothing to do, revel in during most of their waking hours. But no man or woman with real work to do can afford to squander time and emasculate mental powers, in the reading of such literature. Still less can we, who undertake to cultivate our own minds and hearts in order that we may teach others and guide them in the way of an active and honorable life, indulge ourselves in such literary dissipation.

And, indeed, we may indulge too much even in the best literature, unless we use our learning in thought and composition—in some way work it over, as the bee does the sweets it gathers, for the mental food of ourselves or others. As President Bartlett, of Dartmouth, recently said, "Some men seem to know more than is healthy for them. It does not make muscle, but becomes plethoric, dropsical, adipose. Better to have *thought* more and *acquired* less. Frederic W. Robertson, in his prime, wrote, 'I will answer for it that there are few girls of eighteen years of age who have not read more books than I have!' And Mrs. Browning confessed, 'I would have been wise if I had read half so much;' while old Hobbes, of Malmesbury, caustically remarked, 'If I had read as much as other men, I should know as little.'"

But constant activity in learning and thinking and investigating is the law of all intellectual growth. Let a man once come to the belief that he can learn nothing more, or that he needs to have nothing more, and that moment he begins to stagnate and die. If a teacher, he had better resign, and devote himself to fishing or digging clams. For, of all men, teachers need to be constantly learning—not only gaining knowledge in all directions and keeping their minds alert and awake, keen with the pursuit and relish of fresh thoughts and new facts in all the broad world of science and literature; but also continually learning and investigating in the line of those subjects in which they are specially engaged as teachers. Even if they gain no additional knowledge on these subjects, they may at least learn new and more successful ways of communicating instruction to their pupils. The teacher's aim should be to far surpass the mere modicum of knowledge needed to instruct his classes, and to become broadly and fully cultured in all that relates to or is connected with his own work. While he should not set himself up as master of all knowledge, and should not be ashamed to acknowledge ignorance when he is ignorant—for his false pretences will surely find him out; he should be such, both in learning and ability, that the girl or boy of real talents—the one in twenty, perhaps, among his pupils—should look up to him as his superior. And then he should possess such fullness of knowledge, so large an acquaintance with history, with the lives and characters of the eminent men of the past, and with the best literature of all ages, that he may serve as a common luminary, as it were, to his pupils, or as an oracle able to explain to them, and illustrate by apt instance and example, whatever is the subject of his teaching.

And sometimes students suddenly awake to a sense of the immense wealth of literature that lies about them, open and free for their possession But they know not where to begin, nor how to choose. And to whom sooner than their teacher will they be likely to apply to be their "guide, philosopher and friend?" This is his opportunity. This is the time when his mature wisdom and his wide acquaintance with books may enable him to warn them against what is bad or worthless, and lay out for them a proper course of reading. What they shall read at this particular juncture may be the very turning point of their future career, and then if ever they need the guiding hand of a wise and judicious leader.

But this largeness of learning, this broad and accurate culture, which may enable one to be an oracle in literary matters, no teacher can possess at once, any more than he can understand at once and without experience the art of teaching. But he can attain, and it should be his constant endeavor to attain, the one as well as the other.

But with all our efforts to cultivate our minds, we have no call to be book-worms. It is not for us to search deeply, and with minute and exhaustive accuracy, into the lore of the past; or to engage all our energies to solve some difficult problem, which when solved perhaps will make the world no better or happier. Nor is it to much purpose for us, however poetical our temperament, to indulge often in such feelings as Wordsworth expresses when he says:

> "To me the meanest flower that blows can give
> Thoughts that do often lie too deep for tears."

It is our part to live and act in the stirring present; to furnish and school ourselves as those who must lead a battalion or pilot a ship in the battle—not as those who are to be mere lookers on. Large information, much experience, great cultivation, we ought to have, but they must be such as will make us valiant and ready and skillful for the work in which we are engaged.

Then we must have enthusiasm. That teacher always accomplishes most who manifests a deep interest in the study he has in hand, and by his zeal and earnestness inspires the same in his pupils. Dr. Arnold, comparing high scholarship and the want of it in a teacher, said: "If one, however, must give way, I prefer activity of mind and an interest in his work to high scholarship." One of the pupils of this great teacher, writing many years after he had left his school, says: "Dr. Arnold's great power resided in this, that he gave such an intense earnestness to life. Every pupil was made to feel that there was a work for him to do—that his happiness as well as his duty lay in doing that work well. Hence an indescribable zest was communicated to a young man's feelings about life. * * Pupils of the most different natures were keenly stimulated. None felt that he was left out, or that, because he was not endowed with large powers of mind, there was no sphere open to him in the honorable pursuit of usefulness." And doubtless many of us know from our own experience that, in the case of many pupils, their making any progress at all in their studies depends on the stimulus they get from their teachers.

We need, therefore, while securing for ourselves the most thorough educational preparation, to gain also a vivid sense of our relations to our pupils, and of our responsibility both for their success in their studies and for their future character as men and women. The foundations of society in this land must be strengthened, or the superstructure will topple and fall. The boys must not only be thoroughly instructed in the learning of the schools, but they must be taught to be honest and manly, strong against the seductions of vice and luxury; and the girls trained in all the virtues of Christian womanhood. And the work of strengthening and developing this mass of mind, of forming and training the generation that is soon to fill the places of trust and power, and to mould in turn another future, falls in great part upon the teachers of the land. If we are satisfied simply to creep about humbly among the children, the nascent men and women, the future capitalists and professional men and politicians, and all who are to toil and labor in whatever business or calling—yes, and among the possible gamblers, thieves and murderers of the future, too—and to teach them a little grammar, a little mathematics, a modicum of science and Latin and history, and nothing that takes hold immediately and positively of character, of the vital forces of moral and intellectual life—we certainly have attained but a low and unworthy apprehension of our functions and responsibility as teachers. Our proper duties towards our pupils, in instructing them in those branches of knowledge which they must understand in order to qualify them for business and professional life, we, of course, must perform faithfully and with all the ability we possess. But after all, what is the worth of a knowledge of Geology, or Greek, or Geometry, towards the making of a man or a good citizen, if there is a want of truth and honest principle in the heart, and an unchecked development of all the vile passions of our nature.

It is not our province, it may be said, to care for the morals of our pupils, and train them in the ways of uprightness and purity. The parent and the religious teacher, we may be told, must see to the culture that belongs to character. It is their work, unquestionably, first of all; but it is ours also. It is ours especially in the case of those whose home training has been useless or bad, and on whose minds the instructions of Church and Sunday-school have fallen, if at all, as rain upon an indurated soil. As a mere matter of economy in teaching school studies, the vicious and untrained boy must be taught common morality and decent behavior, and led into some proper apprehension of what he is and what he is living for. But when we consider that this now vicious boy is soon to be a man, and that his being a bad, or a worthless, or an upright man, may depend upon the influence that we, indirectly or positively—by the example of our daily lives, or by our timely counsels—may exert upon him, is it not clear that we have a duty to perform towards our pupils, in the line of their moral culture, from which we cannot honestly escape?

Now, I do not argue that we are to be constantly preaching duty and reading homilies to our pupils; though an earnest talk, when fitting occasion offers, may not be out of place. Our influence with them must be more that of the tone and character of our lives and of our daily dealings with them. It must be that which arises from the ordinary discipline of the school, the impression we make of our love of truth and our hatred of lying and every vice, and the scorn we have for what is mean and dishonorable. We must make it appear that no sneak, or tale-bearer, or foul-tongued boy, can be tolerated in the school. There should be such a spirit of manliness and honesty among the pupils that the teacher can say, as Arnold did on one occasion: "It is not necessary that this should be a school of three hundred, or one hundred, or fifty boys; but it is necessary that it be a school of Christian gentlemen." It is this tone in the school—it is this honor and truth *lived*, rather than preached, that turns vicious, selfish, cowardly boys, into upright and true-hearted men.

The young men of our day are tempted as those of a previous generation never were. A premium seems to be placed, as never before, on dishonesty, on sharp dealing, on the thousand modes of making money and building up fortunes that are not the modes of hard-working hands and brains. They see wealth and the fruits of wealth all about them. They see young men, but recently their own playmates and comrades, suddenly blooming into affluence, or rising without merit into positions of honor and power. "Why must we," they say to themselves, "toil on in this low plane of steady, honest work, and not also take our chances among the stock-gamblers of Wall street, or buy or scheme our way into positions of trust, where we may secure our thousands, and be

able to roll in wealth as the Jim and Dick and Tom of our school days are doing." This is the kind of temptation that is spreading its seductive enchantments in all forms and on every side, before our young men.

And what can deliver them? What can strengthen them, and enable them to stand firm in unswerving integrity? Just and severe laws will not make them honest. Protecting them by setting a watch upon them, by subjecting them to severe tests, by removing temptation from before their eyes, will not make and keep them honest. The integrity that stands the test, the pure gold of honesty, must be that of the heart, of the enlightened conscience recognizing the fact that there is in the future for every man "a just recompense of reward" Anything short of this, as the foundation of an upright character, is but sand of a greater or less degree of firmness. It is not the granite of the everlasting hills; it is not the rock that has breasted the ocean's billows for a thousand years.

And have we, as teachers, nothing to do with the forming and compacting of such a character? Shall we have the plastic minds of boys and girls under our instructing and educating influence for years, and within the very atmosphere of our lives, with those abundant opportunities for the occasional word of advice and warning, which, because it is only *occasional*, and, as it were, accidental, is the more effective and controlling, and yet fail to do whatever it is in our power justly to do, to mould them according to the pattern which the One Book displays, which the One Teacher exemplifies and describes—the pattern upon which the ten thousand times ten thousand best men and women of all the world have endeavored to form their lives?

My Fellow Teachers, ours is a most important vocation. We have a vast field of influence; we have great opportunities; we are under weighty responsibilities. Our whole being and all our powers should be enlisted in our work. Whatever serves to constitute our personality—heart, intellect, physical energies, our relations as citizens, our social qualities—we should constantly cultivate and use, in order that we may most efficiently train and educate into intelligent, upright and law-loving citizens, the pupils entrusted to our care.

Men generally may not much esteem our work or honor our calling. But let us take courage and contentment from our own sense of their exceeding worthiness and importance. The great forces in the the natural world, gravity, light, heat, magnetism, are silent forces, but they are tremendous in their results. So the process of education and training in our schools is more or less a silent one, hidden away from the gaze or thought even of the great, noisy, busy world that surges around us. Yet it oxygenizes, as it were, the very life-blood of civilized society. Let us, then, devote ourselves with earnest heart and singleness of purpose to the work in which we are engaged, assured that in no other way can we so well serve our country and promote the happiness and welfare of men—in no other way so well acquit ourselves before God for the talents He has given us to be *used*, and not *buried in the earth*.

DISCUSSION: ARITHMETIC.

The paper of Prof. Sensenig, on Resolutions laid over at West Chester, was taken up for discussion, action on the resolutions being the pending question.

Prof. F. A. Allen: When these resolutions were before the Association last year, everybody seemed loaded and ready to fire; I hope they will do so now.

Supt. Kain, of York: We might cut the matter short by adopting a substitute recommending that "Mental Arithmetic" be stricken from the law. This would leave the Superintendent free in his examination on Arithmetic.

Dr. Wickersham: The law did not divide Arithmetic into two branches, but my predecessor in the Department made the distinction on the certificate.

Prof. Allen: We do not need to change the law, but the practice. Some think mental arithmetic necessary to salvation, and not in homeopathic doses either. Pupils have been compelled to spend too much time upon this branch, and a change is needed.

Supt. Buehrle: The law may be all right; but what are we to do with a certificate calling for "mental arithmetic." Shall we leave it blank?

Dr. Wickersham: You can mark Arithmetic as one branch. It is understood, of course, that oral and written arithmetic will both be taught—we do not propose to abandon oral recitation; but we need only one textbook.

Mr. W. S. Schofield, Philadelphia: We owe thanks to him who put "Mental" into the certificate as a distinct branch. It has revolutionized the old routine methods, and infused into our whole work a new spirit of rational thought. Perhaps now that it has done this great work, we need not give it so much prominence as at first; but it must be maintained and defended as the logic of numbers.

Supt. Buehrle read from the act of 1867, § cxli., where among the branches enumerated we find "mental and written arithmetic," in accordance with which the certificate is made out.

Supt. B. F. Shaub, Lancaster: We do not justify the extremes to which this subject of mental arithmetic has been pushed in some localities; but in discussing the matter we should try to get some definite understanding of what is meant by the term "mental" in this connection. As mental arithmetic is treated in the new text-books, it means simply analytical arithmetic—the analyses upon which the operations rest. It is not proposed to do away with this instruction, and the remarks made by some gentlemen, holding this analytical process

up to contempt, seem entirely uncalled for. Suppose the word "mental" be stricken from the law and the decisions, would that prevent Superintendents from examining in oral arithmetic?

Supt. H. R. Stewart, Mercer: All agree that one great object in teaching Arithmetic is to discipline the mind. Whatever processes are found to accomplish this result, we should adopt; first familiarizing ourselves with them, then giving them to the pupils. It is waste time to quarrel about names and terms; we want results; and whatever produces them, is the method we should use.

Supt. Geo. J. Luckey, Pittsburgh: The first resolution is a move in the right direction. Mental arithmetic has been a stumbling-block in many places. Some teachers seem to find it necessary to devote most of their time to it, which is entirely wrong; and the first two resolutions contain the remedy for this. But the third proposes to substitute for mental arithmetic the two branches of algebra and geometry: This is wrong also. These are studies for young men and women, not for beginners. We should arrange our common school education for the benefit of children, knowing as we do that not one in ten will remain in school long enough to learn even the elements of geometry or algebra. It is a mistake to attempt to make every common school a high school. We might take a hint from the German schools, which do their work well as they go along. We find many immigrants who have not gone beyond the elementary branches, but those they have mastered thoroughly.

Dr. Hays offered the following substitute for the pending resolutions:

Resolved, That the special attention of the teachers of the State be called to the judicious suggestions of Prof. Sensenig's paper, in order that, in adopting such method of teaching Arithmetic as they may prefer, this method shall be duly considered.

On motion, further discussion of the subject was postponed till this afternoon, and Association adjourned till 2 p. m.

WEDNESDAY AFTERNOON.

MUSIC by a quartette, after which the subject of Arithmetic was resumed, the pending question being on the substitute offered by Dr. Hays.

Supt. M. Gantz, of New Castle: Mental Arithmetic is an old friend of mine; and believing it has done much for the advancement of our profession, I do not like to hear it spoken of slightingly. This study gave the first impulse to systematic teaching, and developed a spirit from which grew the logical treatment of other subjects. It has done a good work, and perhaps it is not so necessary now as at first; but we should not drop it altogether. Even if we did so, its good influence would be felt in our schools for a hundred years; but we should not forget or ignore old friends.

Prof. F. A. Allen: We are a little mixed in our definitions. All arithmetic is mental. The clear distinction is between oral and written work, and the question is, when the use of the pencil will serve us better than the mind alone, shall we not use it? There is nothing gained by teaching pupils to solve long and complicated problems mentally; it gives no useful results. The resolutions do not contemplate giving algebra to beginners, but the geometric forms should precede arithmetic. There are schools in the State where children who cannot solve simple problems in arithmetic, can readily distinguish by name the simpler forms. After the elements of arithmetic are mastered, then we should give them elementary algebra. The whole subject of arithmetic should be taught from a text-book of not over 150 pages.

Supt. Kain: The time has come to pronounce a decided opinion, and I am opposed to substituting this merely advisory resolution. The original proposition expresses the opinion of the majority as concisely, fully and clearly as it could be done, and we do not need the very mild modification. The objection that the adoption of the resolutions would banish oral arithmetic from the curriculum has no weight; no one desires that. The former opposition came in great part from the book-makers; now they have books on the new plan, and the opposition weakens. I do not believe in letting "Mental" stand on the certificate as a monument to its past usefulness; if it must have a monument, take up a collection and build one. We need a decided expression on this subject.

Supt. B. F. Snaub: I decidedly favor the substitute, and believe it will reach the same end as the original resolutions; besides, I like its spirit and the style of expression. The substitute should be abopted, and we shall thus get rid of a declaration that seems ill-timed, and might produce mischievous results.

Dr. Hays: I have drawn this substitute, and recommend its adoption, to get rid of a resolution that I do not wish to vote against, and am not exactly prepared to vote for. Having confidence in the judgment of teachers, I refer the matter to them. Some mental work is desirable in teaching arithmetic; much written work is essential: let each teacher judge of the best proportion for himself.

The question was put on the substitute, and it was adopted.

Supt. V. G. Curtis, of Corry, read a paper on "Teachers' Tenure of Office."

TEACHERS' TENURE OF OFFICE.

V. G. CURTIS.

AFTER having rashly and inconsiderately promised the Chairman of your Executive Committee that I would undertake to open the discussion on the theme above named, I discovered, all too late, that I "had reckoned without my host;" for, on sending out my inquiring thought in search of some solid premise on which to base an argument, I was chagrined to find that the thought, like Noah's dove, "could find no rest for the sole of her foot," but after a weary and fruitless flight over the deep waters of perplexing uncertainty, would return to me again. It was not difficult to see dangerous shoals upon which the educational ark might drift, but the Ararat of safety could not be so readily discerned. It is always easier to see defects in a system, and find fault with the methods of its application, than to suggest a remedy and carry out plans for a more perfect accomplishment of the work in hand; and if I succeed only in pointing out some defects, and leave it to the maturer minds of veteran educators to perfect plans for avoiding them, I shall do as well, at least, as the astute Irish pilot who had assured the captain that he knew every dangerous rock in the harbor, and when the ship soon after struck and was shivered by the shock, exclaimed, "Be jabers, an' that's *one* of 'em!"

Summoning first to our aid the ever-portentous array of statistics, we find that the vast body of 200,000 teachers in the United States may well be compared to the ocean in its restlessness. Each year records the coming and going of thousands. Of the 20,000 teachers in the State of Pennsylvania during the present year, 4,000 probably fill the office for the first time; only 5,000 have taught five years or over, and the average age of all the teachers in the state does not exceed twenty-six years.

Thus it appears that the whole teaching force of the state changes every five years.

When we reflect that these rapidly thinning ranks must be recruited chiefly from mere tyros, callow lads and misses, who may understand arithmetic and grammar, and a smattering of the various "ologies," as taught in a fourteen-weeks' course, but who have not the faintest idea of the philosophy of education, to say nothing of mature age, stability, and sound judgment; when we realize that the future destiny of the country rests with this rapidly-changing caravan that is moving through our schools as teachers, that halts for a few terms and then passes away forever; when we become painfully aware that many of our best teachers hold their office by the most precarious and delicate tenure, that in *too many* instances, after having gained skill and competency by years of patient study and painful experience, they are subject to removal without cause, obliged to step down and out, to make way for transient travellers along the educational highway, who make teaching a half-way house on the road to other more lucrative occupations; when we seriously contemplate the disastrous results following the unchallenged admission (into a department of labor which pre-eminently requires skill) of verdant youths and inexperienced misses into whose careless hands is entrusted the training of immortal minds; then, indeed, we *may* find opportunity to sound quite a blast upon the bugle of reform, and lustily shout for an advance all along the line.

However averse we may be to Cæsarism in politics, it is hardly likely any one (who has any business outside of a lunatic asylum) will deny that constant rotation in the office of School Superintendent, High School, Grammar, Primary or District School teacher is detrimental to the efficiency of any department of instruction. If it should come at all within the category of debatable questions, it would only be necessary to call your attention to the vast improvement in the educational system of the State of Pennsylvania, and the grand results brought about by its workings during the last ten years, by the wise policy of continuing in office the honored gentleman whose distinguished ability and devoted consecration to his work eminently qualifies him for the responsible position of State Superintendent. If other examples were needed, I would have only to cite you to the admirable condition of the public schools of such cities as Pittsburgh, Erie, Harrisburg, Allentown, and Easton, whose Superintendents and many of whose teachers have been laboring for a decade with constantly increasing efficiency. In short, there can be no doubt that when a man has once proved his special fitness for such a position, he should hold it during his successful administration.

If the benefits of this permanency of office are so marked and obvious in the case of State, City and County Superintendents, then the same principle must hold true of all who are well adapted to the work of developing the human intellect. It is a significant fact, however, that the same permanency does not prevail in the lower departments of many of our city schools; while in the rural districts, except in rare instances, the whole system is in a kind of fluid state, subject to incessant fluctuation.

This uncertain tenure of office, with its attendant results, cannot, indeed, be traced to any single cause, but is only *one* defective link in a chain of causes and effects, belonging to an excellent system imperfectly carried out.

We will not find, I opine, that anything is entirely out of joint, but it may be necessary to administer a useful tonic to the whole profession—profession, I have said, but discretion suggests the wisdom of being modest in bearing that title. We have been long accustomed to indulge in oratorical descants and somewhat extravagant verbiage, on *professional* labor, *professional* training, and the dignity of our *profession*, when the fact is, if the business of teaching, as it exists in the United States at present, were weighed in the balance of strict essentials of a learned profession, it would be found sadly wanting.

True, in its subject matter, in the materials to be operated on, its scope, the general tendency of its results, and *some* of the means employed, it may

justly be entitled to rank as a profession; yet in the most essential elements, it falls far short of the required standard.

Business is a general term. It comprises any exercise of labor, knowledge, or experience, for the purposes of gain. When it consists in buying and selling merchandise, it is called a trade. When there is a peculiar exercise of skill, it is called an art. When learning, or particular skill of a high order, is required, it is called a profession. The essentials of a profession are a thorough scientific knowledge of the established rules and principles involved, and technical skill in the application of the principles.

Institute a brief comparison between Law (an acknowledged profession) and Teaching, and you will note that the objects of both are the greatest good to the greatest number. Law aims to guide the adult; Teaching leads the young. Both work upon mind. In this scope, both allow the widest latitude of which the human mind is capable in theorizing for those for whom the theories are digested. In their results, the general tendency of each is to a more enlightened and ennobling liberty for the human soul in its efforts for the good and true. Thus far they coincide. But with regard to the science of Law, there appear

1. Accepted maxims, written or unwritten.

2. The potent common law, unwritten but steadily advancing by self-evolution toward ultimate perfection.

3. The positive statute law, its systematic codes and principles.

4. The precepts of natural law as made known by Divine will and methodized by human reason.

Concerning the mechanical methods required by the profession of Law. There are,

1. A prescribed method of study before one is allowed to become a member.

2. An examination of candidates by members of the profession.

3. Established measures—Bench and Senate—for purifying the profession of unworthy members.

4. Well-digested and systematic codes or rules of practice.

The science of Teaching, as it now exists, contains no accepted maxims. Its customs and usages are mostly unwritten, and are nearly as indefinite and various as the members engaged in teaching. Its positive and codified rules for practice, exist only in the weary hopes of some theorizing brain. Its precepts of natural law are numerous, but only serve the important purpose of inspiring each educator to write a new work on Psychology. With reference to mechanical methods in the business of teaching, there is no prescribed method or time of study; no uniformity of examinations, no established rules of practice, no systematic code of principles.

My digression for this hasty comparison only shows that while the times, in their spirit and requirements, tend rapidly toward ultimate system; that while teaching *ought to*, and no doubt soon will take rank among the nobility of acknowledged professions; yet there is a positive necessity to raise the whole superstructure before we can hope to elevate it to that dignity. And this question of permanency of office is only one of the educational jack-screws which must be applied by those who hold in their hands the levers of progress. In Prussia and France and most European countries, a person who once secures a position as a teacher can reasonably count on retaining it during life, or at least during good behavior. But a three-years' course in a Teachers' Seminary and a thorough examination test of scholarship and professional ability is required before one can presume to become a teacher in those countries.

In this country very few persons engaging in teaching expect to remain at the business for life. The majority of our teachers are ladies, well adapted by nature to instruct the young, but unfortunately they *will* marry, and in *this* State we have no law to prevent it, (though the authorities in the neighboring city of Buffalo tried to place an embargo on matrimony by one of their resolutions last winter.)

We have vigorous, sturdy and energetic young men among our teachers; but as they are the future lawyers, physicians, clergymen, and senators of our land, their energies are directed more to their own studies than to the interests of their pupils. We must have beginners and apprentices, in all trades and professions, to be sure; but we cannot go on the principle that "well begun is entirely done." In fact, there is no *inducement* in this country to make teaching a life-work, on account of the meagre salary with which teachers, as a majority, must be satisfied. True, there are many teachers in our larger cities who may be considered well paid. But $2,000 is deemed a large salary for a man who has spent six or eight of the best years of his life, and as many thousand dollars in money, for his preparation for the work, and there are *only fifty persons* connected with public schools in our State who are paid that amount. How many bank cashiers, how many insurance secretaries, how many doctors, how many lawyers, how many book agents, do you think we could find who receive $2,000 and upwards per annum? More than fifty, I'll venture to assert.

Very few State or City Superintendents in the United States receive a salary of $4000, while railroad presidents, insurance company secretaries and presidents, eminent lawyers and physicians, often have a salary or an income of from $10,000 to $25,000; and it surely does not seem (from our stand-point) that the measure of ability needed to count money and care for stocks, bonds and sureties; to figure the average expectancy of human life, or manage a railroad; is of any *higher* order than that which is required in one who has in hand the training of the young, and the development of those God-given faculties which make man "little lower than the angels." On the other hand, there is a premium placed on inexperience, from the fact that novices in the business of teaching are generally paid more than in any other avocation. The clerk in a bank or in a business house must be satisfied with very small earnings for the first few years, while he is learning the business. The young physician must needs have much patience, while waiting for his first patients. The embryo lawyer, after having graduated from the Law school, does not expect to have briefs accumulating on his hands, when first his shingle flaunts in the eyes of the public. But often graduates from colleges or academies obtain as lucrative positions as trained teachers, and hence the market is full of incompetents, who have no intention of making teaching a permanent business, but only take to it temporarily because it is most available.

This huge boulder of an obstruction in the path of educational advancement can only be removed by offering greater inducements to teachers to thoroughly qualify themselves, and by reducing the pay of mere apprentices.

The standard of qualification should unquestionably be raised, and a strong effort made to secure uni-

formity. City and County Superintendents through the State, by means of committees appointed at their respective conventions, could agree on topics and questions, to secure this uniformity in provisional certificates. Professional certificates, at any rate, ought to mean the same thing in Greene and Chester counties that they do in Wayne and Erie. I am not certain, from any specific data that I have at hand, how nearly the State Normal examinations approximate to uniformity. But it seems more imperative in their case, than with regard to professional certificates as they are now granted.

I now come to the saddest part of my story, in the consideration of that most perplexing feature of the whole matter—namely, the *selection* and retention of teachers. Unquestionably, the selection should be like the natural selection of Darwin's theory, in which the *fittest* alone survives, and their retention in office should depend upon intellectual attainments, adaptation for the work, and ambition to excel.

In most of our cities this is virtually in the hands of the superintendent, whose earnest efforts will, of course, be directed towards securing the best teaching talent to be had for the money. But under the present law the local board is vested with the power to steadily advance the efficiency of their schools by continuing in their employ such teachers as have proved their fitness, *or* they can effectually *dam(n)* the river of progress—and their schools—by changing teachers every new moon. Many of our directors are chosen for their honesty, intelligence and capacity; for their liberal ideas and sound judgment. When this is the case, the good teacher need not be uneasy as to his tenure of office, and the community will be blessed by a wise administration of their educational affairs. But when the office of director chances, as it sometimes does, to be made the small currency of a corrupt political exchange; when personal popularity, party spirit, or sectarian prejudice, enter into the choice; when any portion of a community are so blind to their own high interests as to exalt to such a position narrow-minded, parsimonious, pig-headed fogies, embalmed relics of a former epoch, who have no more idea of the educational demands of the times than a South Sea Islander has of moral philosophy, then, indeed, there is no hope for permanence and stability in the office of the teacher who is so unfortunate as to be dependent upon the whim of such a set of ignoramuses.

In view of this lamentable aspect of the case, we may be induced to clamor for more legislation, and wish to centralize the authority, and take from local boards their power to thus cripple the schools under their charge, and curse the community which is so unfortunate as to be subject to the caprice of such directors as I have just described. But by this plan of local management, the schools are "BY the people and OF the people," and while they make provisions for educating their children, they educate themselves —a consummation devoutly to be wished, in many instances, as you must allow.

And as to legislation, while existing laws can no doubt be improved, yet we have much to do, in this State at least, to work the school system up to its full capacity, and no great reform can be brought about by simple legislation.

In the harmony of Nature, not a stone falls to the ground that does not shake the whole great earth. Not a particle of light gushes from its remote fountain that does not affect the whole vast universe. So no subject can be considered without its innumerable correlatives. Whatever can be done to educate the public sentiment to a just appreciation of the importance of education; whatever tends to establish a bond of sympathy between the masses and those who lead the educational thought of the day; whatever tends to place a true value upon high competence and real professional skill; whatever is done to elevate the business of teaching to its proper rank among the learned professions — will together operate to strengthen the tenure of the teacher's office, and at the same time strengthen every relation that the cause of education sustains to the interests of civilization and of human progress.

DISCUSSION.

Dr. Wickersham was requested to open the discussion on the paper, and responded: This is a serious question, and touches a matter in which the United States is exceptional among the nations of the world. In all other countries teachers remain longer in the profession than with us. Circumstances seem to combine here to make the teacher's professional life a short one, and it averages but little over five years. In Europe the teacher receives with his school a house to live in, and local authority cannot remove him: if he is competent and conducts himself properly, the position is permanent. You know how different it is with us. Several circumstances tend directly to shorten the term of professional life: 1. The large number of lady teachers, who are apt to get married. This is not to be counted as loss; we need the teaching of good mothers in our homes. 2. The shortness of school terms, affording employment for only half the teacher's time. People want for their life-work some steady, regular employment. 3. The smallness of salaries, which in the majority of cases will not justify first-rate men and women in making a permanent business of teaching. The capacity required for a good teacher commands far better compensation in other directions. To reach all these weak points, we need an enlightened public sentiment; and as we are passing through our formative stage, perhaps we gain something in this constant infusion of new blood, to compensate for our losses.

Prof. Allen: Perhaps it is as well that the tenure of office is so short; it certainly is in the fitness of things that our lady teachers should get married. At all events, we need not expect, in our time, to have the term long enough and salaries high enough to pay teachers for their work. We must just deal with things as we find them, of course making improvement as we have opportunity.

Dr. Hays: How long, in the rural districts, does a given teacher remain in a given school, on an average?

Dr. Wickersham: Not more than two terms, perhaps less.

Miss Lewis, Tioga: With us they do not average a year where we have two terms.

Prof. Maris: Have we enough teachers? Can we raise the standard, and still fill the positions?

Supt. Shaub: We have an abundance of applications this year, and have employed more high-grade certificates than heretofore. We have issued certificates to all who were qualified, and have more teachers than places. A larger percentage than usual were rejected.

Supt. Jones: Forty years ago a teacher remaining for the second term in one school was a phenomenon; it was argued that the pupils soon discovered the teacher's weaknesses, and a change was desirable; but as public sentiment became more enlightened, this view was abandoned; and now a good teacher is generally retained if he desires to remain. There is some advantage in the influx of new blood; the boys and girls coming into the ranks keep the older teachers awake; we do not suffer much from this periodical change.

Supt. Shaub: Get public sentiment right, and you will have little trouble with the tenure of office, where you have good teachers.

Prof. Cooper: The teacher is often responsible for the shortness of tenure. He spends his time looking out for a better place next year, instead of doing his best wherever he goes. Good work generally commands respect.

Mr. S. J. Barnett: Some Directors, judging others by themselves, think a teacher can tell all he knows in one term; but in our neighborhood they are learning to keep their old teachers as long as they give satisfaction.

Mr. B. N. Lehman: Prof. Cooper's theory may be good in some places, but there are Boards of Directors who abuse their powers, even to the extent of voting a teacher out of his position because he tries to make improvements which they cannot appreciate.

The discussion closed here.

EXCURSION TO PARIS.

The Committee on Teachers' Excursion to Paris was announced as follows: Dr. George P. Hays, of Washington and Jefferson College; Deputy Supt. Henry Houck, of the Department of Public Instruction; Prof. F. A. Allen, Mansfield; Supt. B. F. Shaub, Lancaster; and Supt. H. S. Jones, Erie.

HIGH SCHOOLS.

Prof. Buehrle called up his resolutions relative to State aid to High Schools (see page 92). He was certain the High Schools need some support in the present emergency, and wished the Association to decide whether this was the kind of help that should be given.

On motion of Dr. Hays, the resolutions were indefinitely postponed.

Miss Patridge read a selection by request —"Rock of Ages, Cleft for Me."

PLACE OF MEETING.

Association proceeded to select the place for its next meeting, when Reading and Franklin were placed in nomination by Supts. Baer and Prather respectively. After some discussion a vote was taken, resulting —Reading, 33; Franklin, 28.

NATIONAL ASSOCIATION.

On motion of Dr. Wickersham, an invitation was extended by this body to the National Teachers' Association, to hold its next session in Philadelphia, and Dr. W. was requested to advocate the same at the National Association at Louisville.

TICKET AGENCY.

The amendment offered by Mr. Geist (see page 69) to the Constitution and By-laws, was taken up.

Supt. Raub said that this office had been created in 1867, in flush times, and a salary of $50 attached. The treasury of the Association can scarcely afford this at present, and the proposed amendment will impose the duty of making railroad arrangements upon the Executive Committee, as was the case prior to 1867.

Supt. Buehrle said that, on account of the general excursion arrangements offered by railroads, it was almost impossible to obtain special rates for such assemblies as this, which was the principal object in establishing this office.

Dr. Hays said that while the Ticket Agent might have been very useful a few years ago, the last speaker had correctly stated the present status of railroad matters, and the office was not needed for that purpose.

The amendment was agreed to.

EXECUTIVE COMMITTEE.

The amendment to the Constitution offered by Prof. Raub (see page 69) was called up, and Mr. R. stated that on account of the absence of some such provision, difficulties had arisen in calling meetings of the committee, nobody being authorized to do so. He thought it desirable that this proposition should prevail, and the Association elect its own chairman of this important committee.

The amendment was agreed to.

TIME OF MEETING.

The amendment to the Constitution offered by Supt. Glenn (see page 69), changing the time of meeting from the second to the first Tuesday of August, was taken up.

After some discussion, Dr. Wickersham said that in view of the invitation just extended to the National Association, which meets about the same time, it might be well not to decide upon this matter until next session. He therefore moved that the consideration of the amendment be postponed to the next session, and the present clause of the Constitution be suspended so far as to allow the time for next meeting to be fixed by the Executive Committee.

The motion was agreed to.

An invitation was received from the Y. M. C. A., to visit their Library, which was accepted, and the thanks of the Association voted.

The members were also invited to visit the extensive establishment of the Burdett Organ Company.

Adjourned to 8 p. m.

WEDNESDAY EVENING.

SESSION opened with a solo—"Rocked in the Cradle of the Deep," by Prof. Missimer, of Erie.

PHYSICAL TRAINING.

Miss L. E. Patridge spoke briefly on the subject of Physical Training. Considering that all admit the three-fold nature of the child, it is strange that in our education we should overlook one or two parts of his nature so entirely. Yet it is a fact that we seldom hear anything about moral training, and scarcely ever about physical. When we remember that the mind manifests itself through the body, and that a defective body cripples its manifestation, it is singular that this branch of training should be so universally neglected. It *ought* not to be necessary to talk on this subject to intelligent people, but you all know that it is. You think and talk ten times more about how much mental arithmetic shall be taught to the children than about the way to have them grow up strong and healthy. Yet it is not a mind only that you are training; it is a mind, soul, and body—a *man*.

But what can you do about it? you ask. It is true you have no appliances, most of you, and the school-houses are not adapted for many exercises; but you can all do a little, and that little may be the "ounce of prevention" you so much need. Of course, you will be told that the country boy can get exercise enough from the plow-handle, and the girl from the broom-handle; but *you* know that these exercises do not prevent them from growing up awkward and physically ill-developed. We want training that will give symmetrical development; the country needs it as much as the city; and there are simple exercises that can be introduced into every one of your country schools. Of course, you will meet with opposition; but if you wait until public opinion pushes you into doing anything, you are not the educator, but those who push you: you should be leaders and makers of public opinion. I have had these prejudices to encounter in my own experience, and have conquered them; and so can you, if you will.

When you introduce your little exercises, do not call them by hard scientific names, and do not take much time; a few minutes in a day will add as many years to many a life. Besides the benefit to the health, you will find this a means of discipline. Children are naturally restless, and you thus give that restlessness a legitimate channel, and secure both better order and healthier children. I make this plea more earnestly in behalf of the girls, because boys will manage to get some exercise. But the girl from her earliest years is forbidden the games that give her brothers their development; she must be a "little lady," and wise men forget that these "mothers of future generations" will transmit to those generations the puny little life that they allow them to attain. Parents do not realize that if they give their children health and strength, they need no other wealth. How dare we neglect the body, when we know how its weaknesses affect the mind and soul? We should teach children to reverence the body; teach them that disease is a crime, unless inherited—when it is a curse.

Yet, as we look around us, where do we find a perfectly healthy woman of forty-five or fifty? and how could they be so, considering the way they dress? They shut themselves up in a Bastile, giving themselves no room to expand, or grow, or be anybody. We might take a lesson from Paganism on this subject of physical education. True, the Greeks made too much of the body, because they knew little of the soul; but we go to the other extreme as regards the body, and do not concern ourselves proportionately about the soul either! Here, in this association of teachers, you have not had one word for the body until now. You need to think of these things, and to introduce physical exercises of some sort into your schools. Do not allow yourselves to be laughed out of it, or forget it, or neglect it; but *do* it. There are plenty of simple exercises which require no apparatus, and which can be introduced into any school.

In conclusion, the attention of the ladies is especially called to a subject which time and circumstances do not allow us to consider here—that of Dress Reform. It is thus mentioned because of its extreme importance. Remember that upon the mothers of this generation depends the question whether their daughters shall develop into grand women, or be dead weight on the world; and teach and act accordingly.

Trio—"O Restless Sea."

In the absence of Mrs. Rickoff, who was announced to read a paper this evening, the lecture of Dr. Hays, on "County Institutes," set down on the programme for to-morrow afternoon, was delivered at this time.

COUNTY INSTITUTES.

GEO. P. HAYS.

THEORETICALLY, the County Institute is one of the grandest educational agencies ever devised by a Superintendent, proposed to the teachers, and furnished, for the benefit of the children, to admiring parents. It is assumed to be a place where teachers meet to contribute the experience of each to a common fund for the benefit of a common cause, that all may know what are the sure paths to success and what are the remedies for all evils and difficulties, and go away armed at all points for their future work. This is a delightful theory, certainly; but, as a matter of fact, it must be confessed that scarcely all the Institutes in the state come up to this grand ideal. Indeed, so marked is the difference between theory and practice, that in many places a prejudice has grown up against the Institute; chiefly, I think, in the minds of those who do not understand whom and what it is really for. Let me briefly indicate my own opinion for whom it is intended, or first for whom it is *not* intended.

1. It is not intended for the wholly or incorrigibly stupid—those who are constitutionally incapacitated for receiving ideas, and who come to Institute, expecting to acquire there all the knowledge that is to be imparted to the pupils, and also the way to teach it. There are teachers, and Directors too, who think that a week's Institute instruction should enable a person to get a certificate!

2. It is not intended for those who are wholly incompetent to teach. The Bible is truly profound where it speaks of "aptness" to teach. Such fitness is an endowmentof God, received at birth, and impossible to attain afterwards. To be a successful teacher, it is not only important to be properly educated; one must be properly *born;* and none who have not this natural "aptness" are fit to teach other people's children, or to have any of their own.

3. It is not intended for those people who have a cast-iron, inflexible style of mind—who can see a good idea and appreciate its value, but can take it only as it is given them, and cannot allow for flexibility in the application; the kind of people who would rather die in respectable homeopathy than give contemptible allopathy a chance to cure them!

Having indicated those for whom the Institute is not intended, we now pass on to those for whom it *is* intended.

1. For those who know the details of the "branches," but are hungry for something beyond. This hunger is a manifestation of mind, an indication of talent; and its satisfaction will greatly improve their working capacity. These come full of questions on subjects which lie in their pathway; and if the instructors understand their business and do their duty, they go home full of matter. It helps them marvelously when they come to deal with the dozen good minds among the pupils, which make the public opinion of the school; and such pupils, always readily discern and appreciate the full teacher, who knows more than the book.

2. For those of less experience who have met with special difficulties, for which they were unprepared, and want an opportunity to ask somebody who has been there and knows. These can get various prescriptions from the educational doctors, and among them find the proper compound to cure the particular disease. Here comes in the value of a "question-box," which can be made a useful help.

3. For those (and this class should be more numerous) who believe that there may be many good ways of doing a good thing, and that they may improve their own methods by hearing those of others. One of the most annoying of heresies is that which holds that there is only one right way of doing anything. It is doubtful if there is any plan or rule so good that it should be applied to all cases, or at all times. Teachers know that it is better that the pupil should not know exactly how the recitation is to be conducted, for instance; and so in many other things.

Having our Institute properly constituted, how shall its work be conducted so as to get the best results? Under this head, I shall give some suggestions that seem to me practicable, which I would try in practice if I were a Superintendent, and would ask an opportunity to try if I were an instructor.

1. Divide the Institute into two sections, composed respectively of the more advanced teachers and those who are inexperienced. In a large county especially, where there are several hundred teachers assembled, it is simply impossible to meet the wants of all at the same time. At our last county institute a gentleman

from Ohio gave a number of little experiments, with simple apparatus, which might be introduced into every school, and which took the advanced teachers a little beyond the ordinary lines of thought, and were very interesting to them; but to the inexperienced they would be of little value.

Having divided the Institute as suggested, in the elementary class it would be well to have first-rate teachers bring in a rough class of children from the streets, and illustrate upon them the methods approved by their experience. This kind of instruction is especially important in those sections where the teachers cannot have the advantage of Normal School training; of course, a term in such a school would answer this purpose better, but where you cannot have that, the next best thing is to train the beginners at Institute.

The great and manifest advantage of this plan of dividing into classes, is that the time of both classes of teachers is utilized, instead of that of one class being wasted while instruction is being addressed to the other. Of course, some who need the elementary training would enjoy and profit by the instruction given to the advanced division, and may complain that they cannot have the advantage of both; but we must consult the good of all, and if we give each class as much as they can hold, of the food they need most and which they can best digest, they ought to be satisfied.

2. The work of instruction should be done very largely, if not entirely, by professional instructors; and as I am not an instructor of that class, this need not be regarded as a piece of professional impudence. The instructors should possess, in the first place, native ability to teach; secondly, they should be persons of large experience in teaching, in different kinds of schools, with successful results; thirdly, they should be persons of large resources, able to answer all kinds of questions on all sorts of subjects, giving half-a-dozen ways of dealing with a difficulty, adapted to all possible cases. A notable instance of this readiness is found in the distinguished Sunday-school worker, Rev. George A. Peltz. With these qualifications, an instructor may be said to be prepared for Institute work. If the instructor cannot do these things, then he is not worth the time which he occupies in pretending to teach teachers how to teach.

But I hear some one ask, Are not our own teachers to do any institute work? Shall we not hear from them? Yes, certainly, but not at County Institute. All through the county local institutes should be organized, to meet once in two weeks or a month. There need not be a large number to make a good class—three teachers who mean business could hold a first-rate institute. In these local institutes the work of general institute can be talked over, and the results obtained by applying its instructions communicated and compared; experiments in different methods suggested and results given; and so light will be given and received by all. Difficulties peculiar to the locality can here be best stated and provided for. Altogether, the local institute is a valuable help, and its proper work lies in the direction indicated. The teacher can here acquire facility and correctness in expression, which will be serviceable in every part of his work; and wherever teachers are earnest and interested in their work, such an institute will be successful.

3. The County Institute should close with a written examination on the work of the week, upon the result of which should depend the pay of teachers for the time spent in attending it. This would cure the trouble of absenteeism. Of course, it is very natural for the young ladies and gentlemen to make the most of each other's society at such times; and it is against the interest of us ministers to object to a practice so productive of wedding fees; but when that feature is given the uppermost place, we need not expect the results of good, honest work. Institute week should not be regarded as a vacation—it either means work, or it means nothing; and to ensure this work being done, I recommend an examination. If teachers must spend the time of Institute in shopping, gallanting and courting, I propose that they shall do it at their own expense, and that the people shall not be taxed to pay the aforesaid fees. Of course, the Superintendent who adopts this plan will be criticised—the one who will not be criticised for something will not be elected until the millennium—but the all-sufficient answer to this particular criticism will be, "The teachers were present, and the examination shows that they gave attention to the work; they will give you an equivalent for the pay you give them for the time." Directors will not fail to see this, and it will strengthen both the Institute and the Superintendent. Besides, it is right that those who do nothing shall receive no pay; and that those who put in a week of manly or womanly work, intelligent work, whose results cannot fail to benefit the children in our schools, shall be paid for their labor.

4. The time of holding the Institute is an important matter. It is doubtful whether it is ever wise to hold it before the school term begins. The teacher does not then know his school, the nature of his work, the particular difficulties he has to encounter; and is not therefore fully acquainted with his own wants. Neither should it be held after the term is nearly over, or the light there gained is lost to the district which pays for the time. The memory will not retain everything, and that which is soonest applied in practice is best retained. If the Institute comes near the close of the term, the teacher is apt to "pull through" in the old way, and forget much of what was learned before another term. The best time for Institute, then, would seem to be about a month after the schools open. The teacher knows his school by that time, and has it classified; the work of the term is before him, and he has found out where he needs help; now is the time to give it. The new methods are presented, his questions are answered, his difficulties heard and remedies suggested, and he has time to use what he has learned for the benefit of his school.

These thoughts and suggestions are the result of reading, observation, and the experience of others as well as myself. How far they may be practicable, I do not know. Some of them seem to promise improvement in directions where it is needed. The great object to be kept in view is to infuse such a spirit into the teachers that they will regard the Institute as a means of intellectual improvement—a place where they may have their problems solved, their difficulties removed, their methods improved, their defects remedied; and besides all this, may get a broader view of their work, and of the world around them. I have laid special stress on diverse methods of presenting the same subject to different minds; because it is much easier, in college or school to find people who know so much that they attempt to teach more and faster than is judicious, than to find those who can properly teach what they know.

Perhaps we could do no better with the Institute than to make it a week of earnest study of methods of teaching, and of the relation of the branches taught to the world of knowledge outside.

Duet—"The "Cavillers."

Miss Patridge read a pleasant story from Hans Christian Andersen.

The following committee was appointed to conduct the election of officers: Messrs. J. C. Graham, Crawford; T. A. Hagerty, Erie; B. N. Lehman, Delaware; M. Gantz, New Castle.

Adjourned to 9 a. m. to-morrow.

THURSDAY MORNING.

MUSIC—"Beautiful Home"—after which Rev. Thomas Fullerton, of Erie, read from the Scriptures (Proverbs ii.) and offered prayer.

On motion of Messrs. Kerr and Prather, the vote by which Reading was fixed upon as the place for next year's session, was made unanimous.

NOMINATION OF OFFICERS.

Nominations were made for officers of Association for the ensuing year, as follows:

For President—B. M. Kerr, Meadville; R. K. Buehrle, Allentown; W. N. Aiken, Lawrence.

For Vice Presidents—Miss Mary R. Field, Bucks; Prof. J. A. Cooper, Edinboro. (Supt. S. A. Baer, of Berks, was also named, but declined being a candidate.)

For Secretary—J. P. McCaskey, Lancaster.

For Treasurer—John Morrow, Pittsburgh; C. H. Brelsford, Philadelphia. (The latter gentleman withdrew his name on condition that Mr. M. accepted a reëlection.)

For Executive Committee—S. A. Baer, Berks; A. B. Dunning, jr., Luzerne; G. H. Richards, Lancaster; J. C. Graham, Crawford; Geo. P. Hays, Washington; Mary E. Butler, Indiana; Benjamin Franklin, Beaver; Miss S. R. Lewis, Tioga; V. B. Curtis, Corry.

For Enrolling Committee—Henry Houck, Lebanon; A. F. Kraut, Lehigh; Miss Carrie Bemus, Erie; T. M. Stewart, Lawrence; T. A. Hagerty, Erie.

On motion of Dr. Hays, Prof. Allen was requested to cast the unanimous ballot of the Association for all those officers where only the required number of candidates has been placed in nomination.

LOCAL SUPERVISION.

Supt. B. F. Shaub, of Lancaster, made a verbal report from the committee appointed last year on the subject of Local Supervision of Schools. He stated that while the committee was deeply impressed with the necessity of closer supervision, they had deemed it inexpedient at this time to ask for legislation in the premises. The experience we have had in attempting to amend the school law was deemed to warrant their taking that position. We were not sure, indeed, that any proposition looking in this direction might not have led to results opposed to what we desired. In accordance with this opinion, the committee have taken no further action, and have no further report to make at present.

DISCUSSION: TEACHERS' INSTITUTES.

The lecture of Dr. Hays on "County Institutes" was now presented for discussion.

Supt. Baer, Berks: Many improvements would result from working out the suggestions of the lecturer. The division into grades is particularly desirable in large counties, where it is difficult to reach all classes of teachers. We have divided our time into a morning session of strict institute work, drills on methods, etc.; afternoon exercises of a more general character; and evening entertainments. In the morning the Institute is divided into three sections, according to grade, and instruction adapted to each as needed. We do not, however, depend entirely on outside instructors, but use our own best teachers. I do not see how the Doctor's examination could be put in practice in an institute of four or five hundred teachers.

Dr. Hays: It could not be done so as to exclude the possibility of collusion, or so as to cover all the points of every speech made during the week. But suppose you took an hour on the last day, in the afternoon, not admitting the public, and allowed each instructor to put half-a-dozen test questions, requiring written answers: I think you would find it to work. I tried it once, and read the papers afterwards; that is where your work comes in. This plan will certainly reach one trouble: if the teachers' pay depends on the result of such an examination, they will be present and attentive.

Prof. Allen: In Maine, when the Superintendent had no power to examine teachers, we tried this plan at Institute, and gave the teachers a certificate showing the result. The paper had no legal validity, but many school boards recognized them, and for many years this certificate was the only standard of comparison between teachers. The examination consisted of ten questions on each of five topics, and was held at the

Friday afternoon session. We found it quite practicable, and the teachers who held good certificates found them useful. The plan secures regular attendance and attentive listeners. With regard to the time of holding Institutes, he considered the Christmas holidays about the worst possible time. The time proposed by the Doctor is good; but when so many counties open their schools at the same time, how could all the Institutes be supplied with instructors?

Supt. S. H. Prather, Venango: Our county Institutes are profitable, and we have good attendance and good results, without the proposed examination. If there is to be such an examination, let it be at local institutes held in different sections, and consisting of one hundred teachers, or less. We believe in having a good social time at County Institute, especially in the evenings; but we do not waste our time. At our local institutes the lawyers and doctors come in and take part in the discussions, and the teachers are able to hold their own. We cannot exclude the public, and if there were a public examination, many teachers would not attend, and we should be injured, not helped. Live teachers need no such stimulus, and others would not be much benefited by it.

Supt. H. R. Stewart, Mercer: Let the Superintendent require the teachers to attend institute and be examined on its work, and grade the certificate accordingly. If they are absent without a good excuse, issue a six months' certificate; they will be present next time.

Miss N. E. White, Edinboro: One great mistake in our Institutes is that they are not practical enough. Teachers get too much theory, which they can get just as well in the books; but what they want to know is, how to put this theory in practice; they do not know how to apply it. If the instruction given to young teachers should take the form of teaching a class, and illustrating particular methods, better results would be secured.

Supt. Baer: We could not conduct such an examination as is proposed, unless institute were divided into sections; and even then I doubt if it be practicable. One more word about employing home talent. If a teacher can do good work in his school, he should be able to instruct a class of beginners at institute; and if he cannot express himself so well as the professional instructor, he can meet the particular wants of the locality better, because he understands them. There is too much random shooting at institutes; our own men hit the points that need it. We find their value in what we call "experience meetings"—times set apart for asking and answering questions, etc. This kind of work comes down to our wants.

Dr. Wickersham: This idea of examination is new among us, and at first sight I am inclined to think it is in most cases impracticable. The adaptation of instruction to each grade is desirable. It is well to assign special seats to each township delegation, that the Superintendent may see who are present. A leader might be appointed for each township, to take charge of his delegation, examine them at the close, and report.

Supt. Luckey, Pittsburgh: Dr. Hays made a good speech, but it contains some heresy; and what I consider the most objectionable point, seems to meet general approval. There seems to be a perpetual plot on foot to get more examination out of the teacher than the law requires; and I for one am opposed to it. Why should the teacher suffer in this manner all his life, when doctors, lawyers, and ministers escape? We can't get a really permanent or professional certificate; it is always crippled in some way—either only good for a limited time, or in a particular county. These re-examinations are an imposition on teachers; and we will never have a profession until there is some point at which it stops.

Supt. W. N. Aiken, Lawrence: I am not sure this examination would be a good thing. Perhaps, as the last speaker says, we have enough of that sort of thing already. Instructors, teachers and Superintendents are tired at the end of the week, and do not feel like going into an examination. Besides, it is a pretty large undertaking to work up the results, even for one hundred teachers. I doubt the propriety of the suggestion made by another speaker, to cut short the certificate on account of non-attendance; compulsory methods are not always the best.

Miss Jane E. Leonard, Indiana: In some of the Western States they hold Institute for several weeks, taking up a particular branch of school work each year, and holding an examination at the close of the term. Such an examination would, of course, give better results than one based on a single crowded week's work; but a Superintendent may do much good by reviewing his work as he goes along—it keeps the teachers alert and in their places. One thing the manager should keep before him—that

teachers are not incorrigible dolts, that they do know and learn something, and therefore need not have exactly the same ground gone over every year. They come to the Institute for inspiration, for strength, for light; they will always come, if the management shows any appreciation of their wants. Instead of going over and over the old track, let teachers of high scholarship, at home or from abroad, give us help at the points where we need it, and Institutes will not be failures.

Prof. Geo. P. Beard, Washington: We cannot make a stereotyped plan for Institutes. The organizer must consider the material to be worked upon, and adapt the instruction to the grade of listeners. Written reviews are good, where practicable; and no teacher who is fit for his business would consider such a review an "imposition." The record made by such a written review would be valuable to the Superintendent, especially in those large districts where he sees very little of the teachers' actual work.

Prof. Cooper: I am so constituted, unfortunately, as to have a keen perception of defects in everything with which I am connected; and Institutes are no exception. The mode of conducting them is the best evidence that there is no "profession" of teaching. The Superintendent brings his teachers together for a week each year, and keeps them listening to dull platitudes they have heard so often that they could repeat them from memory. The lady has well said that much of the instruction is based on the assumption that the teachers know nothing, come up each year to get something that will last to the end of the term, then forget it, and come next year for the same information. Besides, taking the instruction as it is, how many of the men who give it so glibly could reduce it to practice in a country school? There are experienced teachers in every county for whom the Superintendent cannot make the Institute profitable; perhaps they ought to attend, to help the others.

After a brief recess, the following Committee on Resolutions was appointed: Supt. V. G. Curtis, Corry; Supt. W. N. Aiken, Lawrence; Miss J. E. Leonard, Indiana.

COUNTY DELEGATES.

On motion of Supt. Buehrle, it was ordered that counties represented by delegates at this session be credited with the same in the *School Journal*, and that County Institutes be requested hereafter to send their delegates with instructions. [Delegates are marked thus (*) in the list of members accompanying this report.]

Supt. S. A. Baer, of Berks, then read a paper on "The Educational Problem among the German Element."

THE EDUCATIONAL PROBLEM AMONG THE GERMAN ELEMENT.

SAMUEL A. BAER.

THE number of Germans in the United States, and their descendants, may be fairly estimated at ten millions; those in Pennsylvania at least at a million and a half. Of this latter number two-thirds are Pennsylvania Germans. If we take our position in the northern part of Berks county, and stretch northeast as far as Monroe and Northampton, southwest as far as Adams and York, southeast to the centre of Berks and Montgomery, and northeast, including Northumberland, Union and Snyder, we have a reach of contiguous territory including seventeen counties, in all of which the vernacular of the people is the Pennsylvania German. If we compute the number of those who within these counties, in their daily intercourse with each other, use this language, omitting those in cities, we will have at least five hundred thousand. Besides the counties included in the above territory, there are many others that are to a greater or less extent populated by this same people.

These Pennsylvania Germans differ from the foreign Germans in this, that they have been thoroughly Americanized. They came among the earliest settlers, and grew up with the colony, and by their industry and frugality they contributed largely to the prosperity of the State. In times of adversity they suffered with their country, and in times of prosperity they flourished under its protection. To-day they number among the most affluent citizens of the State. Their broad acres and pleasant homes are the pride of the Commonwealth. I cannot but refer to what Governor Thomas wrote to the Bishop of Exeter, in 1747, concerning this people. He writes: "The Germans of Pennsylvania are, I believe, three-fifths of the whole population. They have by their industry been the principal instrument of raising the State to its present flourishing condition, beyond any of his Majesty's colonies in North America." After almost a century and a half had rolled around, and these Germans had been tried by fire in the wars of Independence and for the Union, and their industry had become proverbial, a noted Pennsylvanian said of them; "Many of them settled in every county of Pennsylvania, and were mainly instrumental in founding and building up some of the most flourishing portions of the State. With the Puritan of the North and the Cavalier of the South, they fought the battles of our earlier history. The sweat of their brows has fertilized the soil of the country: the light of their genius has illumined the councils of the nation."

There has been a good deal of controversy as to the language of the Pennsylvania Germans. There are those who claim that it is a language by itself, and there are others who say that it is no language at all, but a conglomeration of many languages. Both these parties are in the wrong. The Pennsylvania German is a dialect of the great German language of Europe, from whence it was brought, and where to this day it

is living in all its freshness and vigor as it did centuries ago. When Ex-Governor Orth of Indiana, was minister to Austria, he was at one time brought before the Emperor. The Emperor speaks thirteen languages, but not English. The conversation, agreeably to Mr. Orth, was conducted in German. After a short conversation, the Emperor asked, "Tell me, in what part of Germany were you born?" Mr. Orth replied, "Not in Germany, but in Pennsylvania, in the United States." "But," said the Emperor, "you speak the pleasing accent of the Rhine." This shows that this dialect was the language of the people of the Rhine one hundred and fifty (150) years ago, and it is the same to-day. And when these people came from that beautiful land, with its history and romance, they brought with them their language. And here, in Pennsylvania, along the Pequea and Conestoga in Lancaster, the Swatara in Lebanon, the Tulpehocken and the Ontelaunee in Berks, along the Schuylkill and along the Lehigh, from the Delaware to the Susquehanna, and from the Juniata to the West Branch, could be heard the same sweet accents in every home and by every fireside. This same language, excepting a few English admixtures, is spoken by these people to-day. For one hundred and fifty (150) years the hills and the valleys of Eastern Pennsylvania have reëchoed with Pennsylvania German voices, and it may take one hundred and fifty (150) years more before its last traces will have been swept away. Man is especially jealous of his language. It embodies the golden memories of his life. It is the symbol of his nationality.

But, notwithstanding the fact that the Pennsylvania Germans possess the garden spots of the State, and that their industry and thrift have become proverbial, and notwithstanding the fact that they produced many excellent men as far as character and intelligence are concerned, it must nevertheless be acknowledged that the masses are to a considerable extent illiterate. I use the word illiterate strictly in its primary sense, meaning *ignorant of learning, or of knowledge acquired by reading and study.* The Pennsylvania German farmer in his business is as wise as the philosopher, but of books he knows but little. That this should be so is not to be wondered at. How could it be otherwise? Before leaving their homes on the Rhine, they had been harassed by repeated wars, from the beginning of the Thirty Years' War, in 1618, to the end of Queen Anne's, in 1713. In less than a century their capital city, Heidelberg, was leveled with the ground three times. Almost every decade an army of soldiers like a whirlwind swept over the Palatinate, and left confusion and death in its train. Crops were destroyed, and houses burned. Men, women and children were driven into the forests in the middle of winter, and were left there to suffer and to die. Under such circumstances the cultivation of the mind could receive but little attention. The necessaries of life could scarcely at all times be provided for. And finally, when they left their native land to seek new homes in America, their sufferings were not abated. They were robbed on the high seas, and some of them were even sold as slaves by the agents on landing. In America they were allowed to settle the "back parts of the Province." Thus they became a fortress for the English settlers, to protect them from the Indians. Here again there was no opportunity for education. They were in the midst of a wilderness. Fields had to be cleared, and homes had to be built. To this work they devoted themselves. They felled the forests, they rolled away the rocks, and, if they did not excel in literature, they made the wilderness of Pennsylvania *blossom as the rose.*

But it must not be thought that they enjoyed no educational advantages at all. When they came to America they brought with them their preachers and school teachers (schule meister). By every church stood a school-house, and there were few who could not read their Bibles and keep their accounts. The reason that the masses have always passed at such a disadvantage is, their language is foreign to that of the country.

Nor must it be supposed that they were all poor. Many of the best, as well as of the wealthiest citizens, came to America to seek homes and fortunes. Even some of the nobility left their native Europe for the New World. To this day we can see in many a family the "coat of arms" preserved, having been handed down to the fifth and sixth generation. Many of them were educated. They were not only masters of their own language, but of the Latin as well. It was not rare for them to hand in their petitions in Latin. The records furnish ample proof of this.

It is true that many at the beginning opposed the free schools. This was, however, mainly because the system severed education from positive religion. But whilst it is true that many at first opposed the free schools, it is also true that some of their earliest and best advocates were Pennsylvania Germans. Governors Wolf, Ritner and Shunk, Pennsylvania Germans, stand as pioneers in the cause of popular education in this State. And now that the school system is adopted by every township in the State, in German as well as in English counties, the descendants even of those who at first opposed the system because they did not understand its merits are proud of these men, and with pride do they refer to them and their work in the cause of popular education.

Having now given a brief history of the Pennsylvania Germans, the question arises, "What is their educational problem?" From the nature of the case the question cannot be whether the English or the German shall be the language of their schools. That the English must be the language, is clear from facts undeniable and incontrovertible. That the English is the language of our country no one denies. Our laws are English; our legislatures and our courts are English. There can be no one who doubts that to be a full American citizen demands a knowledge of the English language. Although demagogues may arise from time to time, who, for the sake of being called "champions of the German element," claim that the German should be made the language of their schools, the question of language is nevertheless settled for the Germans as well as for all other nationalities. This is done by the laws of the State, by the practice of at least a quarter of a century, as well as by a destiny as fixed as the laws of the Eternal.

The Pennsylvania Germans must eventually become English. There is no alternative, and the sooner the masses accept the situation the better. This, of course, does not say that they must forget the mother-tongue, nor does it say that they must lose their characteristics as Germans. The Pennsylvania German has the opportunity to master two languages—the English because it is the language of his country, and the German because it is the language of his ancestors. By means of the one he can step forth into the paths of public life, and there achieve for himself and his country that for which his long apprenticeship at

the rural fireside so well qualifies him; and by means of the other he can trace the golden thread of origin, winding through intricate mazes back to the far distant past. With the two languages he will be, in a literary point of view, the peer of any of his countrymen. He will have at his command the science and the literature of the two continents. As the Germanic factor in the civilization of our country, it is not only his privilege but also his duty to make use of all the means available to prepare himself the more fully for his mission.

The question then is not, What does the German element need in point of education? This is plain. They want an English education, and one according to their own type of character, and also a limited knowledge of the German whenever time and circumstances permit. The question however is, *How shall they accomplish this?* What is the easiest and quickest way by which these Germans can obtain the education most suited for them? This is the problem we have undertaken to solve.

When we say an education "according to their own type of character," we take for granted that everybody knows that as there are individual types of character, so there are national types of character. As the Pennsylvania Germans are a distinct people by themselves, so they have distinct types of mental disposition, of mental activity and of mental breadth. As a rule, the Germans are less brilliant than the English. But if the German boy is less quick and brilliant than the English, he makes up for all deficiencies in unraveling knotty points, and in the mastery of the so-called analytic studies generally. To study and regard their peculiarities of mind in the *how* as well as in the *what* to teach, must be the care of the successful teacher. Both methods of instruction and course of study must be arranged accordingly. It is true, in point of studies, the law leaves us little scope, but there is sufficient freedom to adapt them to the wants in the case.

As far as the foreign Germans are concerned, they are like the Pennsylvania Germans in this, that they want an English education according to their type of character, and that they want to retain the German. But they differ from them in this; they have found the key to their problem in their excellent German-English schools, with Kindergarten attached, which they sustain wherever they exist in numbers. The question of pay, however, must be a grave one with them at this time. It would be but just, if in such cities the authorities would, in a sufficient number of primary schools, adapt the instruction to the wants of these people—turn some of the lower grades into German-English schools, to accommodate the foreign element. No one could object to this, and to the Germans it would be a great advantage.

The Pennsylvania Germans, as far as courses of study and methods of instruction are concerned, have no fixed educational policy of their own, nor can they adopt that of the foreign Germans. These have too much German in their course. They start with the two languages, and run them parallel through the entire course. The Pennsylvania Germans need less German. With them the child should be started in English, and the German be merely used as a means of teaching. After the child has learned to read and converse in English, the German should be taken up as a study. The study of the German will now serve a double purpose. The child can master it as a language to the extent required, and by means of systematic translations it will be afforded a drill in language unequaled by any other. While none of the common branches must be slighted, the subject of language must be regarded of primary importance.

In order that these people may acquire such an education, two things are necessary, first, there must be *an efficient corps of teachers*, and second, *a practical plan of instruction*.

I. EFFICIENT TEACHERS.

Suitable text-books, courses of study and practical methods of instruction are all important, but good, earnest, and well-qualified teachers more so. Especially is this the case among the Pennsylvania Germans, where the child is obliged to learn not only the branches, but language also. In addition to the usual requirements of the teacher, he should be especially proficient in language. He should know the English, because he cannot teach what he does not know. He should know the German also, so that he can make himself understood by the pupil and impart the necessary instruction in that language.

The question is often asked, "Which makes the better teacher for the Pennsylvania German—their own talent, or that which is foreign to them?" The answer to this is evident. Of course, at all times, a well-qualified teacher with a knowledge of the English only is to be preferred to one poorly-qualified who knows both languages, even to the neglect, for a season, of the German as a study. But, other things being equal, the question is entirely one-sided in favor of one born and bred among them. In support of this position we would assign the following reasons:

1. Pennsylvania German teachers are to be preferred to teach Pennsylvania German children, because they are not fettered by a want of proper means of communication, and they can give the necessary instruction in both languages.

2. If the profession of teaching is open to them, it is an inducement for young men and women to spend time and money to obtain an education.

3. They can the better appreciate the difficulties of their pupils, because they themselves have to labor under the same disadvantages.

4. They understand more fully than a stranger, the sympathies and prejudices of the masses.

5. They will not do violence to the German character. There is a certain school sentiment, social, political and religious, that goes far to shape the destinies of the child. For the sake of this the children of the Pennsylvania German must not be placed into the hands of any one, though he uses the English glibly, who might impress upon them a character foreign to themselves. We do not here mean to say that these people should be so educated as not to harmonize with the rest of our American citizens, or that the education of America should be Germanized, but neither do we think that America should be Puritanized. Let each class be educated according to its own genius. For the Germans we claim an education, first, according to the German type of character, and second, one that will make them a fit complement and counterpoise to the Puritan and other elements of the nation, giving every other element the same right to become a factor in the great life-flow of the nation.

To furnish the schools of Eastern Pennsylvania with teachers at once fitted by education and character, is a matter that must engage the most serious attention of its educators. Its Normal and training schools must shape their instruction accordingly; and teachers, officers, and institutions must labor

hand in hand to accomplish the work committed to them. We do not here mean to say that the German counties have no first-class teachers. We know that they have such teachers; and we believe that for self-sacrificing devotion to the work and for general efficiency, they, in proportion to their number, have as many as any other section of the State. But they have also a large number of drones. To rid the profession of these, and to elevate the standard of the teacher commensurate with his work, is a part of our problem. And if we think of the low salaries and short terms in rural districts, this question becomes truly a grave one.

2. PRACTICAL PLANS OF INSTRUCTION.

If it is necessary to have efficient teachers to give the children in question the education required, it is no less necessary to have *practical plans of instruction*. Before throwing out any suggestions on this point, however, we must revert to two errors in vogue in many parts of our own German counties. The first is, that the children should begin with the German, and, after having made some progress in that language, they should be transferred to the English. The second is, that they should begin with the English, and, by formal translations from that language into the German, they should acquire the English. Both these practices are wrong. That the first is wrong is evident, for as long as the child learns German only it learns no English. To the second we offer these objections: In formal translations the child frequently knows as little of the German phraseology of the sentence as it did of the English. And if it does understand the sentence, either in part or in whole, it does not get the necessary practice in using the English. There are two things necessary in any mothod that will be satisfactory: First, it must be natural; that is, the pupil must learn from a living instructor, just as the child learns its first words and sentences from the lips of its mother; and, second, it must be practical, and practical in the sense that it affords the pupil a constant exercise in the English already acquired. We learn to read by practicing reading, and we can only learn to speak by practicing speaking.

It is out of place here to discuss methods in their detail. The teacher must in every case develop his own plans according to the wants of the pupil. At no time, however, must this idea be lost sight of, that we learn a thing by doing it. If the child has mastered but three sentences of English, so for its conversation and drills should be in that language. The English must be used, in school and out of it, as far as the pupil is able. This must be the rule for the present; the time may come when the German will demand a more partial consideration.

In order that our suggestions on this point may be better understood, we will set them forth under the different grades existing in the schools. We take the reading-classes as the basis of our grades, beginning with the Primer and ending with the Fourth Reader.

First Grade.—When the teacher gives his first lesson in the alphabet, he should also give a lesson in language. The child must begin with the *names of objects* and the *meaning of words*. It should learn the names of objects in the school-room, as *book*, *desk*, *stove*, etc. The first words usually taught from the chart or board are *ox*, *cow*, *dog*, etc. The meaning of these should be taught even before the child can either pronounce or spell them. Here a knowledge of the German is important.

Second Grade.—In the First Reader, object lessons should be continued. More than the mere names should now be required. There should be conversation about their qualities and uses. Take, for instance, the dog. A great variety of questions can be asked about him. An excellent conversational exercise is afforded by means of the pictures illustrating the lessons. These not only afford a drill in speaking, but are a most excellent means to teach the substance of the lesson. The child can only learn to read correctly when it understands what it reads.

Third Grade.—Object lessons of an advanced grade should now be given: the names of qualities, as well as of color and form, should be taught. Along with talks on objects the idea of the sentence should be taught. These exercises should be oral and written, and much stress should be laid upon them. They are the beginning of both grammar and composition. The use of capitals and pauses can, in this way, be taught with comparative ease.

The contents of lessons should be taught as before, from pictures, and by questions and answers.

The meaning of words should be taught orally, by using them in sentences, and no pupil should be advanced from this or any other grade until he knows the meaning of all the words, and can give the substance of the lessons read in reply to proper questions.

Fourth Grade.—Here object lessons should be given a still wider range, and should be accompanied by oral exercises on general information, geography, and history. Reading lessons should be reproduced by means of questions and answers, both oral and written. The reproducing of lessons and of short narratives forms an excellent exercise in composition.

Grammar proper, of a synthetic character, should now be begun. The meaning of words should be taught by incorporating them into sentences, and by committing definitions. Lists of words should be selected from the different lessons for such exercises, and the pupil should be taught to use the dictionary.

Special drills should all along be given on idiomatic English. Expressions like "Make the door shut," "I have it so in my head," and "Leave me see," should be promptly corrected.

Fifth Grade.—Object lessons should be continued with the view of teaching along with language the elements of the sciences. The meaning of words should be taught by formal definitions and etymology. If necessary, reading lessons should be reproduced orally and written. Special attention should be given to synthetic language. All grammar should be of this nature. The pupil hhving commenced the study of grammar in the preceding grade, will now be able to translate from that language into the English. This forms a most valuable exercise. There should now also be original comparison and letter-writing. There may also be special drills, as, for instance, on words that are both spelled and pronounced alike, or nearly so, in the two languages. Such exercises will prove both interesting and beneficial. The study of geography and history should receive special attention; both from the fact that they furnish an exercise in language and also because they supply the mind with facts and cultivate a taste for general reading so much needed by the people. Indeed, every recitation, be it Reading or Arithmetic, must be made a language exercise. The course of study must be so arranged, and both teacher and pupil must feel, that language is the one thing needful.

The subject of pronunciation must not be forgotten.

Drills in elementary sounds, and phonetic spelling, should be frequent. In fact, every recitation should be a drill in pronunciation, as well as in language. At times, it will be necessary not only to divide words into syllables, and syllables into sounds, but even sounds will have to be subdivided to enable the pupil to master them. But by well-directed drills, and by repeated drills from the first lesson through the entire course, there are very few who cannot master all the difficult sounds, and learn to speak the English readily and smoothly.

The matter then of having a rational system of instruction and a corps of competent teachers, constitute the factors in the solution of our problem. If Superintendents and Directors are faithful to their trust, the work to be accomplished by the Free Schools of eastern Pennsylvania will be accomplished both satisfactorily and speedily. It is true, there are many difficulties in the way, and there is a great work to be accomplished. Besides, the Germans are slow and suspicious. But if they are slow, they are also sure; and if they do hesitate to take hold of anything new, after having once begun a work, they do not rest until it is accomplished. And it would be strange if, in the matter of education, they should prove foreign to their nature. Even now, with all their disadvantages, the German counties are by no means, in point of schools, the poorest counties in the State. Whilst they excel the ordinary English counties generally, they compare in many respects favorably with the very best ones. For example, for good, suitable and well-built school-houses in country districts, there is not a county in the State that excels the little German county of Lehigh. In Lancaster, mainly a German county, the standard of the teacher is not only equal to that of any other county, but is higher than in three-fourths of our English counties. Lycoming reports that some of its very best districts are German. And Berks, proverbially a German county, by the census of 1870, shows in proportion to its population a less number of persons unable to read than its grand old neighbor Chester. Judging the future by the present, we see no reason why the schools of eastern Pennsylvania should not, at an early day, in all respects be equal to any in the country.

The Pennsylvania Germans have often been scoffed at and ridiculed by those who did not understand them, or refused to appreciate their worth. Even in educational conventions they have been held up to ridicule, instead of receiving that consideration and sympathy which they, in their transition state, so justly deserve. But we hope there will be an end to this. As a native Pennsylvania German, who had to contend with all the disadvantages it falls to the lot of Pennsylvania German boys generally to contend with in acquiring an education, we may be allowed the remark that no one who is not a Pennsylvania German can appreciate their difficulties. That they have faults there is no doubt, but that they have been misjudged and abused is equally certain. They are no literary people, but neither are they "dull and ignorant boors" as some have been pleased to call them, although they do speak the German. Nor does all virtue consist in speaking English, even though it be the language of the land. All they want in this matter of language is a little time. During the last twenty years their schools made more progress than those of any other sections in the State. Their institutions of higher education, of which there are many, are well patronized. They were among the first to carry into effect the idea of our State Normal schools, and to-day some of the most successful ones that grace the Commonwealth can be found within their borders. If the educational work among them goes on in the future as it has in the past, which no one has reason to doubt, we confidently expect to see the day when the Pennsylvania Germans will be as much esteemed for their education and culture as they now are for their agricultural prosperity.

Mr. McCaskey: As I find no precedent to govern our action, I now move that in voting for officers of the Association a majority be required for election.

Mr. A. N. Raub: Where there are several candidates, that would waste our time in useless balloting. I therefore move to amend by requiring only a plurality for election.

The amendment was adopted.

Mr. B. M. Kerr, Meadville: I desire to withdraw my name as a candidate for the Presidency of the Association, thanking the friends who placed me in nomination. I am not now engaged in the work of teaching, and am satisfied with the knowledge that mine was the honor of making the motion in Allegheny county Institute which resulted in the formation of this Association. Perhaps I may claim to be its father, and old Allegheny county its mother.

On motion, the declination was accepted; after which Institute adjourned to 2 p. m.

THURSDAY AFTERNOON.

THE first business in order was the discussion of the paper of Supt. Baer, on

THE GERMAN ELEMENT.

Dr. Hays: I am sorry this subject did not come before us when in session in that part of the State where it is a home question. But it is well that the question has been raised, who should be the teachers of these children who come to school to learn (to them) a foreign tongue. It seems plain that it would be better for pupil and teacher to have the same vernacular; because if the teacher knows only the foreign tongue, he will have so much difficulty in translating from and into the pupil's native language, that he will be likely to spoil the child's vernacular in teaching him the foreign tongue. There is no doubt that thorough knowledge of the German is very desirable, if not essential, to those who would teach the children of such a section as that described in the paper. With regard to the teaching of the German language in the public schools, with our present light on the

subject I doubt the propriety of teaching any language but English, the language of the country. With such a mixed population as we have, the one thing which will soonest and most surely unify us is a common language: few things tend so strongly toward disintegration of a nation as different languages. It may be desirable in the German districts for the children to learn German; but even there it is a question whether their acquiring such knowledge is of sufficient importance to the State to justify the expenditure of the public funds in teaching it.

Supt. Baer: I do not ask for scientific instruction in the German language, but only that the children be taught to read and write in German as well as English. I do not believe it is good policy to try to separate them from their race in a single generation; we shall get better results by giving them time. What better exercise for these German children, to teach them English, than translation from one language into the other? Besides, as they already speak German, they will readily learn to read it, and so you open to them the whole field of German literature and science. It will be found profitable, too, to conciliate these German people, who have not always been treated as they deserved, here and elsewhere.

Supt. A. D. Glenn, Armstrong: We have this question in another shape in our county. There are some schools where the pupils understand no English, and there is, of course, a demand for German teachers. The teachers, while they know German and can deal with the children in that language, do not speak as good English as they should. What shall we do?—keep the teachers who know the German and are not so accurate in English, or replace them with those who are good in English, but have no German, and cannot understand the pupils?

Prof. Maris: If they cannot do good English work, they should hardly receive certificates.

Supt. Baer: That is true; if they are to teach English, they must be able to teach it correctly; but it is a difficult matter to settle in such cases as the one just mentioned. It would help us much if we trained up those who could work well in both languages.

Prof. Allen: Whatever we do, we shall not be able to stop these German people from speaking and teaching their children their own vernacular. The question is, Are they willing to learn the English, as the language of the country? If they are, as we have heard from their representative here, then let us teach it to them. It is the business of the State to teach English, not German. The same plea might be made for every other language spoken by the people of any given section; and I think we should teach none of them in public schools. It may be true that at times the German element has not been well treated in this body; but it has never been so well represented as to-day, and perhaps we did not appreciate it properly.

Dr. Wickersham: I am very much pleased with the paper under discussion, and the conservative ground it takes on this important question. Indeed, I have been agreeably surprised at the even tone, the absence of feeling, the clear idea of what is proper and right, which mark this presentation of the case of our German people. I know these people, and can endorse every word that has been said in their favor. They are our brother Pennsylvanians, and have done as much for the Commonwealth as any other class of her citizens; no other has a better stock of solid common sense, or is more capable of accomplishing the great work before them; they will build upon a good foundation. It is true that they have not made rapid intellectual advancement, because their attention has not been turned in that direction; but when their representative men do come into our schools and colleges, we find them standing high in their classes. Now, we have the children of these people to instruct—how shall we do it? The child comes to school able to talk German, but not English; and to start well the teacher should understand the child's vernacular in order to teach him English. If I were to advise from my present knowledge, I should say—teach the German-speaking child first to read and write German, then to read and write English, and thenceforward use English only in study. If further German is given, treat it as a classic, and to be studied accordingly.

Supt. Buehrle: If mispronouncing English is to disqualify a teacher, the Yankee may suffer as well as the German; the latter may pronounce worse, but in German communities there are weightier reasons for retaining him.

Mr. B. N. Lehman: I think the best way to teach English is to have the pupils speak English, and English only, as the language of the school; this will secure better results than by mixing the two languages.

SCHOOL EXERCISES.

Miss Patridge: "Something practical" has been asked for by several teachers, in the matter of physical exercises adapted for school use. I am sorry to confess that we women are so dressed that I cannot show you the best light gymnastic exercises, which require a dress that allows the play of all the muscles. If done in the usual dress, the lady teacher will find her own work ill done and ungraceful; but though she cannot get her arms above her head, the pupils can, and continual exercise of this kind will prevent the girls from dressing so that they cannot, which will be a blessing to them. Some of the larger ones are already dressed so that they cannot exercise with the rest; but if you insist, they will give themselves room to work. You say you have not time nor means. As to time, if you put all you have into mental training, and neglect physical entirely, by and by you will have a class fit for no labor of either kind; will that pay? As to means, no apparatus is essential; have your pupils stand in the aisles, far enough apart to extend the arms without touching each other, and you can give a number of exercises for the hands and arms; the lower limbs always get some exercise. But the teacher must have her heart in the movement, or of course there will be a failure.

Dr. Hays moved that this subject of preserving the life and health of our women, and children by introducing physical training into the public schools, be made the order for such part of this evening's session as the Executive Committee may determine. The motion was agreed to.

Adjourned to 8 p. m. to give the Association opportunity to participate in an excursion on the Lake, at the invitation of the School Board and citizens of Erie.

THURSDAY EVENING.

SOLO—"The Old Sexton"—was well sung by Prof. Butler of St. Louis, Mo.

MORAL TRAINING.

Miss Elizabeth Lloyd: In the eastern part of the State, we Friends, when we have a "concern" on any subject, are not easy until our mind is relieved. I have been in that state for two years at the meetings of the Association, and shall feel happier if I am allowed to express my thought. No one doubts the importance of moral instruction in our schools, yet in the three days programme of last year and this, no part of the formal programme relates to that part of the teacher's work. Remarking on this a year ago, one of the Executive Committee replied, "Why, you had Miss Sanford's paper last year;" and the paper from Lafayette College bears indirectly upon the subject this year, to be sure; but it does seem that it is a matter of sufficient importance to be discussed at least once in two years—as often as Mental Arithmetic, for instance. Most of us can teach that and the other branches if we try, but it is more difficult to teach pupils to be honest, and to avoid profanity; and we might profitably hear from successful teachers on this question. It may be said that the correction of these habits is the business of the parents: but what if they are taught by bad example at home? I know of a neighborhood where all the boys and some of the girls swore, and it was almost impossible to convince them that any man was to be found who did not sometimes swear. I do not ask that we shall have a formal paper on the importance and value of honesty and the other virtues; we know all that; but for answers to the practical questions, and remedies for the difficulties that every teacher meets with. We want to know how best to develop moral strength and purity of character; and I hope the next Executive Committee will let us hear from those who are qualified to teach us.

PHYSICAL TRAINING.

Miss Patridge: The exercises I have recommended to you, besides the benefit to health, develop ease and grace of carriage; and this is not a little thing. We cannot all be graceful, but we *can* all be easy. There is no reason why a boy or girl of fifteen, coming into a room full of people, should feel as if he or she were all hands and feet, and did not know where to put them. The teacher who knows how, can save them from all this, and teach them how to walk, sit, and carry themselves properly. You who put flowers in your school-room windows, and pictures on the walls—would it not pay to teach the children to be ornaments of the room and a part of its beauty?

Will you not all do something?—have a little marching, to music, if you have an instrument; if not, by tapping or counting; do not have the pupils sing while marching, it is too great a strain on the lungs, and neither is done well; the teacher may sing, if desired. The next time you have a dull

afternoon—and we all have them sometimes—when everything goes wrong, when the children are noisy and the teacher is cross—have the windows and door thrown open, whether summer or winter, and take three minutes exercise; then close them, and take your seats, and see whether my prescription has not remedied the dullness. Whatever exercise you use, have a high standard of accuracy, which is difficult to reach, and see how anxious the children will be to work up to it.

AUDITORS' REPORT.

The Committee appointed to audit the Treasurer's account made the following written report, which was adopted:

ERIE, PA., Aug. 9, 1877.

The Committee appointed by the Chair to audit the accounts of the Treasurer beg leave to report as follows:

Balance on hand August 8, 1876.....	$258.48
Dues received at West Chester meeting....	300.00
Total.....	558.48
Expenses at West Chester.....	344.80
Balance August 9, 1877.....	$213.68

Respectfully submitted,

A. N. RAUB,
A. D. GLENN,
FLORENCE E. SICKEL,
Committee.

Prof. Raub, the chairman, stated that he was instructed by the committee to call attention to the details of expenditures last year, some of which were considered extravagant and improper. They thought it necessary to offer a word of caution with their report, for the benefit of the next Executive Committee. [Several itemized bills of the session at West Chester were read and commented upon.]

Drs. Hays and Wickersham, Supt. Shaub, and Prof. Maris, made remarks upon the same subject, recommending greater economy in future.

OFFICERS ELECTED.

The Committee on Election made their report, which was adopted, showing that the following persons had been elected to the respective offices:

President—W. N. AIKEN, Lawrence.

Vice-Presidents—J. A. Cooper, Edinboro; Mary R. Field, Bucks.

Secretary—J. P. McCaskey, Lancaster.

Treasurer—John Morrow, Pittsburgh.

Executive Committee—Dr. Geo. P. Hays, Washington, Chairman; S. A. Baer, Berks; V. B. Curtis, Corry; J. C. Graham, Crawford; Miss S. J. Lewis, Tioga.

Enrolling Committee—T. M. Stewart, Lawrence; Henry Houck, Lebanon; A. F. Kraut, Lehigh; Miss Carrie E. Bemus, Chester; T. A. Hagerty, Erie.

EXECUTIVE COMMITTEE REPORT.

Supt. Buehrle reported verbally, saying that the committee had organized and held the necessary meetings, constructed the programme, and its work was before the Association. With a single exception, it has been carried out to the letter. The committee have every reason to be satisfied with the reception the Association has met with at Erie, and have no doubt the other members share that opinion.

The report of the Committee was adopted, and the thanks of the Association returned to them for efficient service.

RESOLUTIONS.

Miss Jane E. Leonard, from the Committee on Resolutions, made the following report, which was accepted:

Resolved, That our recent and sad disturbances, industrial and social, convince us more than ever of the vital importance of universal intelligence to the very existence of a free state; and that to promote a higher intellectual and moral status, training men to self-government, an American system of education, reaching to all elements of American society, is indispensable.

Resolved, That we emphatically endorse the sentiments embodied in the inaugural address of the President, regarding the complete provision for higher education in the establishment of a State University, which, in connection with the High Schools and Common Schools, shall make a complete system of primary and advanced education.

Resolved, That we respectfully suggest that steps be taken by our State towards establishing a pedagogical museum, where cheap apparatus for teaching the elements of science can be procured by the schools in the rural districts.

Resolved, That the teachers of the state would be benefited and their knowledge of subjects and methods of teaching materially broadened, if systematic and progressive courses, judiciously selected from the common and high school branches to meet the existing necessities of a county, should be pursued at the teachers' institute, in addition to popular lectures, prepared papers, and practical discussions.

Resolved, That our graded High Schools are an important and vital part of the Pennsylvania Common School System of Education, and the full development and largest usefulness of borough and city schools depends upon a well-organized and equipped High School, with a fixed course, and that any abridgment of its work or its support is detrimental to the system of Public Education.

Resolved, That we congratulate the International Exhibition Company of Philadelphia, upon having successfully organized a fine educational and industrial exhibit within the borders of our commonwealth; that in it we recognize one of the most potential educational agencies of our country; and that we earnestly recommend all teachers and friends of educational progress to avail themselves of an examination of their extensive organic exhibit of educa-

tional books, apparatus, and appliances, of the most approved styles, forming, altogether, the largest and best pedagogical museum in this country.

Resolved, That our thanks are due and are hereby warmly tendered to the County Commissioners of Erie, for the use of the Court Room; to the editors and proprietors of the Eri e*Morning Dispatch*, *Observer* and *Gazette*, for the interest and energy shown in the full reports of our proceedings; to Professors White and Missimer, and their assistants, for their excellent music; to Miss Patridge, for her entertaining readings; to the citizens of Erie for their hearty interest in the work of the institute; and especially shall we remember with gratitude the courtesy of the delightful Lake Excursion, gratuitously furnished by members of the School Board.

On motion the resolutions were taken up *seriatim*, and acted upon as follows:

The first resolution was adopted.

The consideration of the second resolution, on motion of Dr. Hays, was postponed.

The remaining resolutions were then adopted as read.

After music, Association adjourned to meet in Reading in August, 1878, at the call of the Executive Committee.

MEMBERS IN ATTENDANCE.

ALLEGHENY—13.
Geo. J. Luckey,*
John Morrow,*
F. M. Sawyers,
L. G. Taggart,
C. A. Kehew,
Mary Stange,*
Annie Herriott,*
Mary E. Walker,*
A. M. Petty,*
J. N. Smith,
M. B. Sloan,
S. D. Owen,
O. H. Philips.

ARMSTRONG.
A. D. Glenn.*

BERKS—2.
S. A. Baer,
N. C. Schaeffer.

BUTLER.
G. N. Critchlow.

BLAIR—3.
D. S. Keith,
Mattie Neville,
Anna M. Johnston,

BRADFORD.
Sarah E. Ballard.

BUCKS—5.
Elizabeth Lloyd,*
Mary R. Field,
Jennie Knight,
Sue P. Stackhouse,
Florence E. Sickel.

BEAVER—2.
Benjamin Franklin,
J. M. Reed.

CAMBRIA.
Hartman Berg.

CLINTON.
A. N. Raub.*

CLARION—2.
A. J. Davis.
Joanna E. Dees.

CAMERON.
N. H. Schenck.

COLUMBIA.
T. B. Miller.

CHESTER—4.
G. L. Maris,
Lida J. Slack,
Sarah Hughes.
Carrie E. Bemus.*

CRAWFORD—8.
James C. Graham,
Eliza Dickson,
C. F. Chamberlain,
Mrs. C. F. Chamberlain,
Emily Sargent,
Kate McGlaughlin,
Emma Carr,
Almena P. Barney.

CUMBERLAND.
I. N. Hays.

DELAWARE—6.
Mary L. Dunn,*
Mary B. Oat,
Sallie J. Lewis,
Minnie C. Dunn,
D. E. Huntsman,
B. N. Lehman.*

ERIE—67.
H. S. Jones,
J. A. Cooper,
Lester J. Barr,
Amelia Kunz,
Ernestine Sevin,
Matilda Grossman,
Celestia J. Hershey,
E. Newburger,
Mrs. J. D. Dunlap,
Emma Gillett,
F. D. Cleveland,
T. A. Hagerty,
V. G. Curtis,
A. C. Kilbourne,
E. J. Burrows,
Mary N. Dunlap,
Mrs. H S. Jones,
F. W. Knapp,
Hattie Moorhead,
Louise Kunz,
S. C. Brooks,
C. J. Swift,
J. W. Canon,
Ida Salisbury,
Edward E. Avery,
Mrs. M. A. Woods,
N. E. White,
E. E. Tyler,
R. E. Hoyt,
Mary V. Golden,
Abby Lowe,
Mary Hulbert,
Abby Hulbert,
N. A. Thompson,
Dr. W. E. Magill,
H. C. Missimer,
James Burns,
P. Crouch,
S. K. White,
J. J. Sharp,
W. Wheaton,
Rev. T. Fullerton,
Lizzie M. Bassett,
J. W. Wetmore,
W. W. Todd,
Cornelia Coughlin,
Florence E. Bemus,
Mary Wagner,
Libbie Hanlon,
May E. Gunnison,
Col. C. B. Curtis,
J. F. Walther,
G. A. Allen,
Lucinda Smith,
B. Hershey,
Emma Davison,
George P. Colt,
J. C. McCreary,
I. B. Gara,
Dyer Loomis,
R. W. Russell,
J. M. Kuhn,
John O'Hagan,
Daniel Long,
Sarah Hubely,
A. B. Force,
Capt. Wm. Lutge.

INDIANA—3.
D. M. Sensenig,
Jane E. Leonard,
Mary A. Butler,

JEFFERSON.
G. Ament Blose.*

LEHIGH—2.
R. K. Buehrle,
A. F. K. Krout.

LANCASTER—9.
B. F. Shaub,
J. P. Wickersham,
Edward Brooks,
J. V. Montgomery,
Geo. H. Richards,
J. P. McCaskey,
I. S. Geist,
J. D. Pyott,
A. L. Hilscher.

LAWRENCE—6.
W. N. Aiken,
A. N. Harbison,*
Thos. M. Stewart,*
E. J. Satterfield,*
M. Gantz,
Mrs. M. L. Aiken.

LEBANON.
Henry Houck.

LYCOMING.
S. J. Drinkwater.

LUZERNE—2.
A. B. Dunning, jr.
A. P. Supplee.

MERCER—6.
H. R. Stewart,
Mollie Tinker,*
G. W. Kratz,*
Rev. B. M. Kerr,
Jerome Leech,*
D. McKee.

MONTGOMERY—2.
Jos. K. Gotwals,
R. F. Hoffecker.

NORTHAMPTON.
A. H. Caughey.

PHILADELPHIA—6.
C. H. Brelsford,
Lydia C. Skelton,
E. C. Rook,
Lelia E. Patridge,
Wm. S. Schofield,
J. F. Sickel.

SCHUYLKILL.
G. W. Bartch.

SOMERSET.
J. B. Whipkey.

TIOGA—2.
Sarah J. Lewis,
F. A. Allen.

VENANGO—7.
S. H. Prather,
Nannie McCrea,
Mary J. Kennedy,
Nannie A. Shreve,
Belle Kennedy,
Clara M. Kennedy,
J. J. Wasson.

WASHINGTON—4.
Rev. G. P. Hays,*
S. A Montgomery,
Belle Brady,
George P. Beard.

WESTMORELAND.
J. Silliman.

WARREN—3.
N. R. Thompson,
D. F. A. Wheelock,
Anna M. Porter.

YORK—2.
W. H. Kain,
S. J. Barnett.

OTHER STATES—11.
Geo. R. Dixon, New York.
Henry M. Butler, St. Louis, Mo.
Mary Edmunds, Ripley, N. Y.
J. H. Haldeman, Westfield, Mass.
C. W. Bardeen, Syracuse, N. Y.
P. B. Hulse, Cleveland, O.
Mary J. Landen, Swampscott, Mass.
G. H. Shattuck, New York.
E. H. Potter, New York.
Emma C. Collins, Egg Harbor, N. J.
Lizzie Clark, Absecom, N. J.

*Delegates from Institutes. Total, 192.

ORPHEUS.—He was the son of Apollo and the muse Calliope. He was presented by his father with a lyre, and taught to play upon it, which he did to such perfection that nothing could withstand the charm of his music. The poets tell that not only his fellow mortals but wild beasts also were softened by his strains; gathering round him, they forgot their fierceness, and stood entranced with his lay. Nay, the very trees and rocks were sensible to the charm. The former crowded round him, and the latter relaxed somewhat of their hardness, softened by his notes. Eurydice, his wife, was bitten by a snake and died. Orpheus sang his grief to all who breathed the upper air, both gods and men, and, finding it all unavailing, resolved to seek his wife in the regions of the dead. He descended, by a cave, to the Stygian realm, and, passing through crowds of ghosts, presented himself before the throne of Pluto and Proserpine. He sang such tender strains that the very ghosts shed tears. Tantalus, in spite of his thirst, stopped for a moment his efforts for water, Ixion's wheel stood still, the daughters of Danaus rested from their task of drawing water in a sieve, and Sisyphus sat still on his rock to listen. Then for the first time, it is said, the cheeks of the Furies were wet with tears. Proserpine could not refrain, and Pluto himself gave way. Eurydice was called. Orpheus was permitted to take her away with him on one condition, that he should not turn round to look at her till they should have reached the upper air. Under this condition they proceeded on their way, he leading, she following, through passages dark and steep, in total silence, till they had nearly reached the outlet into the cheerful upper world, when Orpheus, in a moment of forgetfulness, to assure himself

HAIL TO THE OCEAN FLOOD!

Moderato. "ROBIN ADAIR."

1. Hail to the o - cean flood: hail to the sea! Mir - ror of
2. Earth is our her - it - age; man rules the land, Man sets no
3. Yet hast thou bounds se - cure, bounds fixed for thee, Bonds curb thy

sky and star; fade - less and free. O'er thee from pole to pole,
bound to thee; earth's in thy hand. O'er thee the sun may glow,
ma - jes - ty, fear - less and free! Loud let thy surg - es roar;

Wave heap'd on wave may roll; Yet in thine in - most soul Calm sleeps with thee.
Night her dark veil may throw; Thou no re-straint can'st know; Know'st no com - mand.
Toss thy wild waves ashore Thou can'st no more, no more: God rules the sea.

that she was still following, cast a glance behind him, when instantly she was borne away from him. Orpheus endeavored to follow her, and besought permission to return and try once more for her release; but Charon, the stern ferryman, repulsed him, and refused passage. Seven days he lingered upon the bank of the river without food or sleep; then bitterly accusing of cruelty the powers of Erebus, he sang his complaints to the rocks and mountains, melting the hearts of tigers, and moving the oaks from their stations. The Thracian maidens exhausted their arts to captivate him, but he repulsed all their advances. They bore with him as long as they could; but, finding him insensible to their charms, one day excited by the rites of Bacchus, one of them exclaimed, "See yonder our despiser!" and threw at him her javelin. The weapon, as soon as it came within the sound of his lyre, fell harmless at his feet. So did also the stones that they threw at him. But the women raised a scream and drowned the voice of the music, and then the missiles reached him and soon were stained with his blood. The maniacs tore him limb from limb, and threw his head and his lyre into the river Hebrus, down which they floated murmuring sad music, to which the shores responded a plaintive symphony. The Muses gathered up the fragments of his body and buried them at Libethra, where the nightingale is said to sing over his grave more sweetly than in any other part of Greece. His lyre was then placed by Jupiter aloft among the stars.—*Age of Fable.*

Music hath charms to soothe the savage breast, to soften rocks, and bend the knotted oak.—*Congreve.*

[Editorial Correspondence.]

THE TRIP TO ERIE.

THE extended report of proceedings which appears in this number of *The Journal*, occupies two pages less than we had designed, and as "Erie" is the word of interest this month, it may be as well to devote this remaining space to the same general subject, varying the order with a bit of random correspondence.

The seventeen hours' ride by rail from Lancaster is too long to be all enjoyment. But the twenty-fourth annual session of the State Association was to be held on the Lake, and business being business, and Mr. Pyott, reporter of proceedings for *The Journal*, our traveling companion, we got over the road as promptly and pleasantly as possible. The distance is about 380 miles—almost from one corner of the State to the other—the route affording no little variety of scenery, embracing agricultural, river, forest, and oil regions. An excellent feature of the day was the dinner at Kane, where the conductor, a gentleman of taste, was the last man to leave the dining hall. Here Gen. Kane, of the famous Bucktail Regiment, and late of the Board of Charities, was pointed out to us—a small man in regulation suit of black and under a Panama hat. A small man, indeed, as to weight and stature—but a galvanic battery.

At St. Mary's station we locate the amusing incident of the trip. A party of thirty or forty came aboard the train at this point. Observing that they passed without tickets, and were given to hilarity, we suspected the occasion of their ride, but gravely inquired, "Is it a picnic?" The individual addressed, who sat facing us, paused over his ground-nuts and shook his head: "A *funeral*." For a moment he looked disgusted and solemn, and soon after changed his seat. It was certainly a delightful funeral! And why not sometimes such merry holiday? There are men—though we do not know this a case in point—who never, with generous intent, make anybody glad while they live; and why should not the joy bells ring that they are dead?

Reaching Erie at 7.35 p. m., we found pleasant accommodations at the Reed House, one of the largest and best hotels in the State, our windows opening out upon the beautiful park in the heart of the city, and within sound of the plashing waters of its fountains. Our three days' stay in this thriving city was made very enjoyable. Having visited nearly all the cities and towns of any note in Pennsylvania, and had "official returns" from such as we have not yet seen, we are inclined to put Erie very near the head of the list, as a place in which to live and with whose interests to become identified.

The city lies directly upon the Lake, and has a spacious and well-protected harbor some four or five miles long by nearly two miles wide. It is laid out on a broad and generous plan, with streets from two to three miles in length and from sixty to one hundreed feet wide, crossing each other at right angles; its water supply is abundant and exhaustless; it has a paid fire department; its streets are well paved and lighted; it is well drained; it seems admirably policed, if one may judge from the good order of the place; cars run at brief intervals on its street railway; its manufactures of brass and iron, its saw and planing mills, its immense Burdett organ manufactory, etc., give employment to a large number of hands; its handsome private residences are numerous and in pleasing variety as to architectural style and surroundings; and its churches and schools are to be seen at every turn. We visited a very fine Episcopal church during our stay, also a large Catholic Church, the latter more gaudy than elegant in its interior decorations and appointments. A Catholic cathedral is now under way which, it is estimated, will cost, when completed, some $700,000.

Several organizations in addition to the State Teachers' Association have this year chosen Erie, as the place of holding their annual session. The last of these State gatherings will be the State Agricultural Fair, to be held Sept. 24th, continuing for five days. Every effort is making to render this display at once complete and imposing. Hon. Jno. W. Hammond, President of the State Agricultural Society, a gentleman of large means and much interested in the work, is giving his personal attention to all arrangements now making for the exhibition, which will be creditable alike to the city and the State. The older counties of the East must bestir themselves, or Western Pennsylvania will distance them this year in the contest for premiums.

As to the schools of Erie, they have the enviable reputation of being the best in the State. But this high place has not been won in a day or a year; it has been the legitimate result of liberal management and careful supervision. The School Board has long been faithful to its high trust. The friends of the cause here have for years been watchful that the working majority in their Board should be staunch men, true to the best interests of education. Wise expenditure, not reckless "economy," has characterized their administration of school affairs. They have heard the demagogue's cry of "Taxes!" and, of course, they have had in their Board, at times, men whose niggard stinginess would practically betray the stronghold they were selected to defend. But these men have been kept in a very slim minority.

Within the past six years, six fine two-story school buildings have been erected, all of them arranged upon what is known as the "single teacher" plan. A new one just completed—worth some $20,000—is the best adapted to its purpose that we have ever seen. The Board are of the opinion that, with slight improvement upon the plan of this, they will at last have attained the "perfect" school building. It is two stories in height, with four rooms on each floor; the rooms all well lighted; each of them has its hat and coat-room; it is heated with steam throughout, and each room in both primary and

secondary departments is furnished with single desks of walnut or cherry. This class of buildings will be erected in all the wards of the city. Committees on School Property, empowered to erect school-houses in towns or cities, can do no wiser thing than make a short business trip to the City of Erie.

The School Board here buys town lots, but does not sell them because of enhanced value of real estate. Their business is not to make money, but to make common sense provision for the best schools. Practically, they have no school debt, as the recent report to the Board shows an available cash balance of some three thousand dollars!

The population of Erie is nearly the same as that of Lancaster, about 26,000; but except in the High School department, for which a new building will soon be erected, it has more ample and better school accommodations in every way; it has a larger school attendance; employs one-third more teachers; pays higher salaries, because the grade of ability required cannot be had at very low rates; and is proportionately more interested in and more proud of its schools. The contrast in the educational status of these representative cities affords the best practical illustration to be found in Pennsylvania of the benefit of the City Superintendency, when the office is wisely administered. Erie has for years demanded and secured constant, careful, intelligent supervision. Lancaster, on the other hand, is the only city of its class in the State without supervision, voting the City Superintendency "inexpedient and unnecessary."

The City Superintendent, H. S. Jones, Esq., who is one of the very best school officers in the State, is paid a salary of $2,200. Erie may safely point to her School Board and her Superintendent, and challenge comparison with any other city in Pennsylvania.

Among other things, we saw here, on exhibition in the High School, an attractive display of work in drawing—free-hand, isometrical and perspective—by the pupils, much of which would do no discredit to a professional school of design.

The membership of the State Association was not so large as of late years, the enrollment falling somewhat short of two hundred. The distance to be traveled deterred many who usually attend from the eastern part of the State; the pressure of the hard times and the recent railroad strike were also causes affecting attendance. The papers read, any and all of which will amply repay perusal, appear in full in the present issue of *The Journal*, as a part of the report of proceedings. A very pleasant feature of the daily sessions was the work of Miss Patridge. Cultured, ready, earnest, gifted with common sense and a delightful appreciation of genuine humor, she is always a favorite.

On Thursday afternoon the Association was invited to make an excursion on the harbor and the lake, certain public-spirited members of the School Board, as we understand it, footing the bill. Mr. Crouch, the president, Mr. O'Hagan, secretary, and other members of the Board, accompanied our party in the barge, while Mr. Warfel took the sail-boat with Dr. Wickersham, Dr. Hays, and a dozen others, ladies and gentlemen, who preferred the open boat. We had met Mr. W. on Wednesday afternoon at the head of the bay, where a small party of us had gone on a pleasure trip in one of the small bay steamers, and he had kindly held his carriage at the call of the Lancaster men on Thursday, showing us the town, its pleasant drives and surroundings, and its beautiful cemetery. It was gratifying to find Mr. Warfel, originally from Lancaster county, in the progressive School Board of Erie.

On Friday morning we scattered to all points of the compass. Dr. Wickersham left for Louisville, Ky., to attend the meeting of the National Educational Association, convening there on the 14th inst., and bearing a formal invitation from the State Association to hold their next annual meeting at Philadelphia. A small party of us—choice spirits, of course!—made up from a half-dozen counties, were away for Niagara and beyond. Detained at Buffalo for two hours, we "did" the city under the wing of a good-natured cabman. Taking the cars once more, with appetites "whetted to the cutting edge," we reached Niagara, went through the Cataract House bill-of-fare from soup to coffee, including Southdown mutton, buffalo tongue, and the more delicate viands, and were again ready for exploration and adventure. Our driver gave us six hours of his valuable time. It was a good day, a good party, and we saw Niagara again as though we had left it but yesterday! Some of the Goat Island views and the rapids among the Three Sisters we reached after nightfall, but they lost nothing of grandeur in the waning light. Failing to sight, to hearing the Falls grew all the more tremendous; and the arrowy rush of the rapids took on that ring of metallic quality which one but seldom hears from water in the sunlight.

At Watkins, our party stopped at the Glen Park hotel, where we found home surroundings at moderate figures. Space fails us to tell of a delightful morning spent at chapel in Havana Glen, of rocks cleft so mightily and into forms so strange, of waters that were dashed into foam, lay still in shadowy pools, or ran with quiet murmur on their sunny way. Shall we recall the rainy afternoon, with umbrellas and waterproofs, enjoyed so heartily at Watkins' Glen, our cathedral roofed in by the sky bending over; or the quiet evening at the modest Episcopal church of the village, which rounded out our happy day to full completeness? Shall a word be said of our Monday's trip from end to end of Seneca Lake, twice in twelve hours? Our space, our time, and the patience of the reader are all gone—these days themselves have become no more than a pleasant memory, in whose light some things we saw, some friends we met, look very fair. We bid them—Hail and Farewell! M.

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THE EXPERIENCES OF A SELF-TRAINED TEACHER.

PEDAGOGICS ABROAD.—NO. III.

THE following suggestive paper, giving "The Experiences of a Self-Trained Teacher, drawn from a Professional Career of Twenty five Years," was read before the College of Preceptors, London, May 20th, 1877 The reading was followed by a discussion. We give both the paper and the discussion as they appear in the *Educational Times*. The whole will be read with interest by teachers and school men in this country, not only on account of the light thrown upon a question as important here as in England, but also because it may be taken as a good specimen of pedagogical thinking in the Old World.

THE PAPER.

Whatever of autobiographic detail may be contained in the following paper will be strictly subordinate to the more important purpose of bringing before my fellow teachers and the public the great and pressing need that exists for wise, careful, broad-minded training for our work as teachers.

I should much have preferred to have taken the experiences of any other human being than myself, could I only be assured of as complete a knowledge of the facts of the case. If my premises are necessarily drawn from the everlasting Ego, it is not to these premises, but to the conclusions deducible from them, that the primary importance is to be ascribed.

However, I will make an effort to avoid the obtrusion of the Ego upon your notice by one word more than is absolutely necessary for the sake of these conclusions which affect us all alike, but which, in my belief, affect far more closely the public around and beyond us. My single aim is, to contribute my tiny stream to swell the tidal wave of public opinion, which must sooner or later bear this question of trained teachers into the haven of success. For how does this matter stand at the present moment? So far as I am able to judge, the adhesion of the greater part of those within the profession—for whose adhesion we should care the most—is already gained. The head-masters of our large public and grammar schools have already expressed their sense of this pressing need, in a circular drawn up some two years ago, and most largely signed.

The question has been put in every imaginable form and shape before the great bulk of middle-class teachers, and invariably the principle is assented to with most cordial unanimity. But the public generally, and, what is far more ominous, that more select and cultivated portion of the public who are really interested in education, apart from its political and ecclesiastical surroundings, do *not* believe in the necessity of any such preliminary training. I may refer to the *Spectator* as a case in point. This paper, if any, may fairly be cited as a true representative of the wider and more liberal culture of the nation; and yet on several occasions it has taken the opportunity of doubting the wisdom or the necessity of any special training whatever, beyond a thorough knowledge of the subjects to be taught, and a real sympathy with young life.

The great fear which underlies this denial of what we affirm to be a pressing necessity is, that by training we mean compressing into a narrow, fixed, mechanical groove all the living energy and force which good teaching so specially demands. Probably this fear is somewhat intensified by a belief that the teaching of our trained and certificated elementary teachers is somewhat narrow and mechanical. I am not quite sure that such an opinion is well-founded; and even if it were, I should most seriously doubt its application to the question in hand. Assuming, however, its truth, I think that result may be far more fairly attributed to the almost endless codes, and revisions of codes, and rules, and restrictions, and regulations, and resolutions, by which these teachers are hemmed in and surrounded on all sides, than to the training they have received.

But if this fear as to the result of training is a well-founded one, I believe most of us would at once go over to the opposition benches. Better, far better, to have wise, thoughtful, earnest, scholarly teachers, who really enjoy their work, and take a pride in it, and who know how to feel for and with the young, put face to face with a class, without any special training whatever, and there left to follow the devices and desires of their own hearts, than the same teachers with all their zeal and enthusiasm cooled down to the regulation freezing point, with all their scholarship cut and dried after the most approved and latest fashion, moving about with clock-like regularity, and turning out to order the prescribed quantity of machine-work. But is this the alternative before us? There are teachers now in the profession who are mere machines or martinets, and if every teacher in the land were completely trained, there would still be some who would never rise to a higher level; but this is due to the inherent imperfectibility of poor human nature. Every poet is not a Homer; and every schoolmaster cannot be an Ascham, or an Arnold, or a Payne.

Look at the sister professions. Surely the medical man is trained and disciplined before he is permitted to enter within the sacred enclosure. He has learnt the different modes of treatment of any special case, and their results; but has his training taught him simply to rely on a well-stored memory, or on mere book-knowledge? Has it not rather taught him with a keener eye to discern the special constitutional condition of each patient, and to adopt, under ever-varying circumstances, an individual, and perhaps to some extent an abnormal treatment? It is the empiric and the quack who propound certain nostrums for every imaginable form of disease, for all ages, constitutions, and conditions. And surely the same holds true for our work, The untrained teacher has no experience but his own to guide him, and his great temptation is ever to fall into a certain groove, and there remain contented for the remainder of his days. I must crave your indulgence for thus debating with you about what I am sure is a foregone conclusion; but in reality, I am not thinking about you, as I thus write, but about those outside of us, whose help we want to enable us to interest the public in this all-important question, and for whose thoughtful and intelligent support we deem no trouble too great. But I must return to my proper subject—to myself.

As the only son of a schoolmaster, my earliest associations were connected with teaching work; but in the first instance, it was rather through the pressure of circumstances than by any deliberate choice, that I became an assistant in a school while yet in my "teens." If it be true of schools, as I believe it is of books, that, next to a very good one, a very bad one is the best, I may fairly assert that my first experiences as an assistant-master for three years in a school located not very far from the district which Dickens has immortalized by the creation of his Dotheboys Hall, were immeasurably valuable, from the utter, irremediable worthlessness of the whole affair. Certainly, I had an unrivalled opportunity of learning what not to do, and how not to teach. I cannot recall one single redeeming feature in the place, beyond its natural healthiness and beauty. Nor can I find a parallel to the hopeless inefficiency of the whole business, except in some of the most inefficient of our uninspected and almost unknown Dames' Schools, still unhappily lingering in the back streets of our large towns. Here I was, furnished with resources which assuredly were of the slenderest dimensions, finding in my Principal a man utterly incapable of rendering me the slightest assistance, suddenly compelled to commence a course of crude, vague experimenting. I had to arrange these unknown boys into classes, to devise some sort of a scheme of daily work to try to give some life and interest to their studies; and after all, as an inexorable necessity, to leave a very large margin of available leisure for the boys to fill up, and shade off in all kinds of fantastic devices the printed headings in ornamental copy-books, as this was the one thing the Principal could do, and on which he placed very great importance, because it pleased the mammas. As a training school for young boys whose one end and aim in life was to become successful sign-painters, perhaps even this miserable parody of a school might have had some claims to the patronage of a discerning public. What was the net result of my crude, but anxious and (to myself at least) interesting experiments—so far as the unfortunate pupils are concerned—may be very easily guessed; but, deeply as they are to be pitied, I had for myself the grand consolation that my repeated failures were helping me to form a reserve fund of experience available for future use.

A shorter period of assistant-mastership under more favorable circumstances, in the Midland counties, might have afforded me an admirable opportunity for correcting and maturing my very crude experience, had I not then made up my mind to find a means of subsistence in another profession. Probably the utter sham and incompetence, which I had been watching for so long a period, had disgusted me with a work in which even temporary success was possible under such conditions,—for it is some comfort to record that, almost immediately after my departure, the whole affair came to a sudden collapse. Now, however, I found myself associated with one who had some idea of his responsiblities, and some definite notions and principles of his own, which he endeavored most conscientiously to carry out. These notions and principles seemed to me, at the time, somewhat narrow and mechanical, and they seem much more so now; but still they were real and honest, and gave a tone and character to the whole school work.

After a stay of a year and a half, I entered the University of Glasgow, where I spent five of the happiest and best years of my life. Most fortunately for me, the study of Mental and Moral Philosophy—as at all the Scotch Universities—formed an important part of the curriculum, and an essential condition for a degree; and I cannot put into words my sense of the almost infinite obligations under which I am still laid by the opportunity of learning something of the nature of the human mind, and of the laws under which it acts and is acted upon. Without some such instruction, I cannot conceive how I could ever have presumed to enter upon my present work, except under the impulse of that intense and self-confident presumption which is the true offspring of ignorance.

Here, then, I draw a moral from my own experience, and, with an almost passionate earnestness, I would urge upon my more favored juniors who are looking forward to a teacher's life and work, to avail themselves of the opportunity, now presented within this very building, of making themselves as fully acquainted as they possibly can be with the nature and constitution of that marvelously delicate and sensitive organ with which they will have to deal—the

mind of a child or youth. Of course, I am well aware that, to one possessed of a sympathetic spirit and an observant eye, the daily contact with children and youth will in time impart a very serviceable, or even, in some rare cases, a very profound knowledge of the needs and aspirations of the youthful mind and heart; and fortunate indeed are those who strive to gain such a knowledge. But surely it is far better to bring knowledge to bear upon our practice, to bring, as it were, a light with us to guide us in the thorny path, to enable us at once to reap a richer harvest from our experience, and, above all, to modify and correct the mistakes and defects of our individual conclusions by a larger induction and a wider survey. Surely, such previous knowledge does not diminish the value of our experience; but invests it with a new power, enriches it with a new charm, vitalizes it with a new energy.

Let me illustrate my position by a reference to the laws of association, and their bearing upon the memory. Dull indeed would that teacher be who does not very soon discover how very materially the memory is assisted by association, and unworthy would he be if he does not try to make use of this law in his teaching; but surely he would make both a wiser and an earlier use of it, if he brought the knowledge with him, and gathered up his daily experience under the light which that knowledge would impart. I have spoken of the inestimable value of such a course of study; but I cannot also forget that it is possible for some to go through such a course, and have heard all about it with the hearing of the ear, and be no wiser, no stronger for the knowledge; just as we probably know persons whose whole lives are a faithful fulfilment of the German proverb, "They have been through the forest, and found no fire-wood." But surely for such persons teaching of any kind can scarcely be considered the most fitting occupation, and I think we may at once dismiss them from our thoughts.

It was not until some time after leaving Glasgow that I finally decided upon what has proved, not only the work, but, I think I may add, the joy of my life —and I commenced a school. Now what were my professional resources? I had the very distinct and suggestive memories of my boyhood spent in my father's school; I had the varied experiences of failure and of very transient success as an assistant for four and a half years; and I had the training and insight into life afforded by a five years' course at Glasgow. Yes, I had something more—and something which has taught me more as to the spirit which should animate my work, and as to the method in which I should perform it, than I have ever been able to learn from all other sources—nay, of which I may safely say, all my future knowledge and reading and experience have been but the amplification and fulfilment.

And that something was contained in the words of a dear and honored friend, whose untold services as a clergyman, an author, a professor, and as principal of the neighboring Workingmen's College, will live enshrined in the hearts and lives of those who were privileged to come within the range of his ennobling and elevating influence—the late Frederick Denison Maurice. These words were few, but they were golden words. I commend them to your most earnest attention, as I believe they contain the very quintessence of whole courses of lectures:—"A teacher's true aim is to teach his pupils how best they may do without him, and yet not cease to care for him." I need only add, that these few and simple, yet deep and thoughtful words came home to me with a more intense meaning, as they were read in the light of the noble, self-denying life of him who spoke them.

In looking back now from the vantage ground of a prolonged experience, two reflections force themselves upon me. 1st. I cannot help congratulating myself upon the exceptionally favorable circumstances under which I was placed preparatory to my entering upon the charge of a school. During my whole life I had been more or less connected with school work. My earliest home recollections were associated with school. I had filled two situations as assistant master; and during my whole College course, I had not only been engaged in private tuition, but I had the inestimable privilege of seeing what really good teaching was. I have already spoken of the value of one part of that course, but I should be most ungrateful if I did not acknowledge how immensely I am and ever shall be indebted to the example, the energy, the ever-ready scholarship, the teaching skill, and the invaluable personal friendship of the late William Ramsay, Professor of Humanity. He not only taught, but he inspired; and after this long interval of time, I can most truly assert that day by day the pages of almost every Latin author I happen to be using shine with an added lustre from the association with his ever cherished memory.

But my second reflection is, to my own mind, equally forcible—how utterly inadequate all these circumstances were as a preparation for my work. During almost the whole time that I was passing through these preliminary experiences, I had scarcely any thought of teaching as my future work, and therefore I naturally failed to extract from them all the good they were calculated to impart. Hence I draw a second moral, and I must urge the absolute necessity of making our work one which shall be the object of deliberate and prospective choice, as is that of the Church, the Bar, or Medicine. It must not remain any longer a refuge for the destitute. To secure this end, two conditions are necessary. 1st. It must be made worthy of such a choice by securing to competent men and women a fair means of livelihood, with special prizes for the more gifted minds: and, 2d. None but those who have thus deliberately chosen this work, and prepared themselves for it by a definite course of training, must be permitted to enter upon it. Secure the second, and I am confident the first will secure itself. I cannot disguise from myself as I look back, that *chance* was the presiding power that guided my footsteps towards a school; and I believe this is true of the great mass of teachers—at least of the sterner sex. Imagine this to be possible in the kindred professions of law and medicine. Take the following graphic specimens of such chance surgery, from the pen of Carlyle. Speaking of Leopold, Duke of Austria, familiar to every schoolboy from his connection with that boys' ideal of a king, our Richard the First, he says: "Leopold had stuff in him too. He died, for example, in this manner. Falling with his horse, I think in some siege or other, he had got his leg hurt, which hindered him in fighting. Leg could not be cured. 'Cut it off, then,' said Leopold. This also the leech could not do—durst not —and would not; so that Leopold was come quite to a halt. Leopold ordered out two squires, put his thigh upon a block, the sharp edge of an axe at the right point across his thigh. 'Squire first, hold you that axe; steady. Squire second, smite you on it! with forge hammer, with all your strength, heavy

enough.' Squire second struck, heavy enough, and the leg flew off; but Leopold took inflammation, died in a day or two, as the leech had predicted." (Frederick the Great, vol. i., p. 109.) The dullest intellect can discern between skillful and unskillful surgery. The pocket is a mysteriously sensitive part of the human organism, and that would soon rebel against untrained and unskilled law-mongering. But we unhappy teachers share one fatal disability with the clergy. Everybody profoundly believes he can teach and preach as well as anybody else, and generally a little better. What need, therefore, of any special training for what is within the reach of everybody's capacity?

And then the disproof of this generally accepted axiom is not very easy. My want of skill in surgery is demonstrated at once, if I can find any one so foolish as to permit me to try my "prentice hand" at pulling out a tooth. My utter ignorance of law is revealed in the first paragraph—nay, in the first line of my attempt at amateur conveyancing, and the imposture is detected at once. Our work is carried on before untrained eyes. A little judicious admixture of soothing syrup in the way of holidays, cricket, and football matches, or even extra pudding, combined with a wise withdrawal from any kind of public examination, will go a long way to win the sympathies of pupils and to blind the eyes of parents. Thus the imposture may go on and on undetected; and when the detection does come, it comes so slowly, it is subject to so many explanations and modifications, that a fortune may be gained; or death may end the strife, before this conviction of incompetency has become an acknowledged fact. Every teacher, I am sure, will agree with me that no delusion is more complete than that which leads mankind at large to believe that the real progress of the pupil and the worth of the school can, as a general rule, be tested by the parent. Many parents are simply incompetent for the duty, and disguise their incompetency by the assiduous trotting out of some hobby of their own, which they apply as an unfailing test to all schools. I have myself lost pupils because I would not use spelling books. Flogging is a capital hobby for this purpose; and all the better, because it applies in both directions—it has both a positive and a negative pole, equally charged, and at the same time. "Do you flog?" "Yes." "Then my child does not enter your school." "Do you flog?" "No." "What, not flog! Then I am sure you cannot maintain necessary discipline; you cannot create that 'wholesome fear' (that's a delightful phrase—it looks so profound) and therefore my boy shall not come." Then a still larger class of parents simply have not the time; and in a still larger number of cases, where parents have the skill and the time and the will, the children very firmly resist the attempt, as an unfair invasion of their undoubted rights and privileges. Sometimes rare opportunities do occur which do enable parents or friends to test at a moment's glance the reality or the unreality of the work being done. One such golden opportunity fell into my own hands about eighteen months ago. Visiting a relative at some distance from my own home, the youngest boy, a peculiarly shrewd little fellow, very naturally craved some little help from me in the preparation of some very elementary Latin lessons. He had to write out three paradigms of adjectives and substantives combined. The first was *Bonus vir*, which was written out with tolerable accuracy. But I confess myself somewhat puzzled at being requested to proceed with *Bona vira* and *Bonum virum*. I had hard work to persuade my temporary pupil that there were no such words as *vira* and *virum*. He assured me over and over again that these words had been prescribed for him. I appeased his fears by substituting some other words, and he went off to his school. On his return I asked how the Latin lessons had been got through. "Oh," was his quick reply, "Miss So-and-so" (for it was a preparatory school, kept by ladies) "said it would do; but it was not quite what she wanted."

I have dwelt at disproportionate length upon the preparatory antecedents of my experience, because, believing those antecedents to be unusually favorable, I want to bring the question plainly before the public, if they will remain content for parents of the middle and higher classes of society to entrust the education of their children to persons whose preparation for the work has been so entirely haphazard, so fragmentary, so unreal, so uncertain; while for the lower classes, down to the children in the workhouse, carefully trained and fully tested teachers are provided. It is a very easy, and no doubt a very pleasant occupation, for University Dons to hold up to the gaze of the members of the Social Science Association the whole body of private teachers as "men or women without culture, without elevation of character, often without manners." But if this be true, I would ask, where lies the fault? Surely not at our door. We are doing all we can to arouse the public to the urgent need of reform. Half-a-dozen teachers seldom meet to talk over professional topics, but this very question is put in the very front. At every conference the subject is discussed in all its different aspects, and the unanimity of feeling and opinion is seldom broken by the faintest murmur of dissent.

I cannot dwell so minutely upon my actual experiences, as they depend so much upon details, the recital of which would be most unprofitable to me and most tedious to you. I will rather endeavor to sketch, in very broad and general outlines, its more salient features, mainly bearing upon the question of training *versus* no training, or rather of specific professional training *versus* a hap-hazard training.

I shall not easily forget my own perplexities on standing for the first time in my own tiny schoolroom with my very tiny school of five pupils. I never felt such a responsibility before, or so utterly unfit to grapple with it. I neither knew what to do nor how to do it: but, of course, a very few days sufficed to release me from this hopeless condition. I then discovered, for the first time, the immeasurable distance between the mere teaching of a class and the government and direction of a school. I had but the faintest idea of the proportion of time to be allotted to different studies; and the construction of a time-table of daily work was a difficulty which, I can truly say, was not solved to my own satisfaction until after some years of tentative approaches to a more correct arrangement. My first pressing want was the absence of professional literature. I cannot tell what a boon two or three really sensible works on the management of a small school would have been. What I needed was some practical hints as to the details of my work, as to the best kind of school furniture, arrangement of desks, and different methods of carrying on the elementary work of a school. I was somewhat surprised to find that the most elementary subjects were the most difficult to teach efficiently, especially reading and spelling. The higher subjects pre-suppose more advanced minds, and can be made more interesting in an almost infinite variety of ways.

Anticipating this want of some such literature, I turned to "Stanley's Life of Arnold," as the best and wisest book I could think of for guidance and help. I need not speak of the grand and elevated tone of life and feeling which shines in every page of that masterpiece of biography, which I would fain hope left some impression upon me. That well-known sentence, "It is too bad to tell Arnold a lie; he always believes it," was, and still is, a treasured sentence, and has given me strength and guidance under many a moral difficulty; but I need hardly say that the practical guidance I was most in need of was not to be found in those noble and inspiring pages. On one all-important subject it was utterly useless to look to "Arnold's Life" for help—viz., the school-books I should use. And I cannot imagine how I should have, to any extent, mastered this very serious difficulty, had I not received some most valuable hints from a friend already engaged in the profession.

The possession of a professional literature is, as has often been remarked, an essential note of a profession, and it is a source of deep thankfulness that something is now being done to meet this crying want. To be a living literature, it must be of home-growth, absorbing light and truth and power from all foreign sources, but yet essentially the product and the reflection of genuine English thought and feeling. In the production of such a literature, this College has already, directly or indirectly, taken no mean part, and I earnestly hope it may do yet much more.

A second very pressing need that I felt was really akin to the one just named, the want of a reserve fund of method and experience on which I might draw to enable me to meet the almost daily difficulties of my work. Quick boys picked up their work, as it were, in a moment, and as quickly laid it down again. How was I to secure an abiding place for it, not only in their memories, but in the very fibres of their nature? Indolent boys would not pick it up at all How was I to make them? I well remember, how, many a time, I have longed, during these early struggles, for the help, the suggestion, the sympathy of the living voice; how I longed to know the methods adopted by older and wiser heads, and the results that followed. I soon discovered that no cut and dried plan would suit all cases; but I wanted to find some appropriate place where, amid kindred spirits, some far more favored, more matured than my own, some perhaps less so—I might compare notes, gather up hints, be warned of lurking dangers, and return to my work strengthened and refreshed. Here, I think, we might well learn a lesson from the Elementary Teachers. The country is honeycombed with their associations, where every new-comer finds a hearty welcome and a home, and where all the matters affecting their common interests are freely discussed. This one benefit Mr. Lowe has conferred upon them. His drastic treatment has welded them into a closer union, and finally organized them into a powerful body, to whose representations not only the Government but the public press ever lends an attentive ear. I cannot, even now, always refrain from uttering the prayer that some Robert Lowe would castigate us into a truer and deeper fellowship of feeling. Who of us has not at times been sorely pressed with some special moral difficulty in the school—some flagrant instance of lying or dishonesty? In the presence of such difficulties how poor and feeble all our pre-conceived theories, our individual experiences seem! Each case has its own special characteristic, which revents its fitting in with any specified mode of treatment. I well remember one such instance of dishonesty. I felt quite sure about the delinquent, but I had not an atom of proof, and how to get it I could not imagine. I happened to meet a friend, himself a very successful teacher, to whom I mentioned my case, and he at once gave me a suggestion which succeeded admirably, and has since produced, I believe, very happy results. I doubt not that every teacher of any experience would tell a similar story.

On one subject, in common, I presume, with every human being who has ever really thought about the training and education of the young for one moment, I felt a special need for some such reserve fund—on the subject of punishment. If I may, take the case of Duke Leopold's very amateur surgery as a fair type of the readiest method of ridding oneself of a troublesome limb that would occur to the utterly untrained and ignorant mind, so I may adduce the use of the cane as the simplest, surest, readiest method of correcting all abuses, rooting out all faults, and supplying all deficiencies, which would suggest itself to the unthinking, untrained pedagogue. It has such a look of business about it, and I more than suspect, a very large majority of parents profoundly believe in it to this hour. Cane in hand, and arm uplifted—swish, swash, it is perfectly clear *you* will stand no nonsense. There is such a wonderful air of earnestness, of reality, of determination to get on, about such an attitude of power on the one hand, and of crouching terror on the other, that it is likely to hold dominion over many minds for many years to come. But very soon the question forced itself upon my mind—is this really an *effective* punishment? I could find plenty of sentiment, of a somewhat mawkish species, warning me against the use of such punishment under any possible or conceivable circumstances; but I found this extreme quite as unpractical, as unreal, and quite as cruel, in the long run, as the other extreme. What I wanted most was to find a fund of wise, thoughtful experience, ready to my hand, instead of having to create such a fund through long and tedious years of alternating success and failure. A really wise and discriminating manual on punishment is still a desideratum for all teachers, actual or prospective. I have found no mode of punishment yet absolutely free from objection; and though I try to minimize the objection in every way I can, I fidd it utterly impossible to eliminate it entirely. One rule, as to written impositions, I have found helpful; that in all cases, if written well and done within reasonable time, one-half shall pass for a whole. This rule tends to prevent that deterioration of the writing which the rapid, careless writing of impositions is sure to produce; but I cannot undertake to assert that it entirely removes that danger. I may also add, that a work like Mr. Harris's admirable "Graduated Examples in Arithmetic, arranged in Exercises, each containing ten sums," has proved most serviceable to me in this respect.

A third source of danger, arising in fact from the two already named, was that of falling into a mere groove of custom, and of educating one faculty, and then fancying I had achieved a success. I should have profited little indeed from my studies in Mental Philosophy if I had not—so far as theory was concerned—avoided such a danger; but with the best and grandest of theories, it is not quite so easy as it seems to avoid the very serious and pressing danger in practice. In its coarser form—such as, for instance, stuffing the memory, and neglecting all else—I was not in much danger from this cause; but, unless I am

much mistaken, this evil can assume most Protean shapes, and even woo us, and win us too, clothed in the garb of an angel of light. Under the present high-pressure system of examinations, I find a constant temptation to make a mere one-sided Intellectualism the one standard of success. School is pitted against school, and judged by a purely intellectual standard. Now is it not, after all, a truer criterion of honest work and of success, to make a very ordinary boy, who has no intellectual ambition about him, a useful, intelligent, broad-minded tradesman, than to gain a goodly list of scholarships at Oxford or Cambridge with more highly-gifted boys? We want scholars, but we want men and women to fulfil other duties, to occupy other stations, and to dignify and ennoble the common round of life's hum-drum work by refined tastes, intelligent appreciation of what is good and noble, by large-hearted sympathy, and a ready willingness to understand other men's standpoints, and to view life's problems through other eyes than their own.

If I am naturally proud at seeing any of my pupils reach the Honors' List of the Local Examinations, or to pass through a University course with distinction, I maintain I have no lesser ground for honest pride, no meaner claim to success, if I can see the merchants' offices, the counting houses, and the retail shops in the town where my lot is cast, filled with a large sprinkling of old boys who, amid the dull and cramping monotony of their daily occupation, have barely maintained some of that intellectual force and fire—that large-minded appreciation of other men's convictions and persuasions—that readiness to discern the eternal truth underneath the shifting forms of error and narrow-mindedness—which has been derived from my teaching and influence. If this imaginary picture should ever become a reality, I should feel I had not lived or labored in vain; and I should maintain, with more determination than ever, that the construing and scanning of a Greek chorus was not the only thing in life worth living for, or worth educating for. I have hitherto mentioned difficulties arising *ab intra;* but one portentous external difficulty—one which I had scarcely dreamt of—has thwarted and hampered me, and its effects seem to grow no weaker by lengthened experience—I refer to *assistants.* Several of them have been all I could wish or reasonably expect, but the exceptions to this have been neither few nor slight. I have tried University men and non-graduates—old men and young; and one conclusion has resistlessly forced itself upon me. The want of a distinctive professional status, and of a recognized mode of reaching this status, has simply converted the post of assistant-master into a prey for every needy, unprincipled adventurer, who by his own misconduct, or by his hopeless failure in every other walk of life, has found here a refuge for the destitute, an asylum, like the Rome of Romulus, for all the runaways and scapegraces of society. I am far from affirming that all assistants belong to this class. My major premise is *not* "All assistant-teachers are scapegraces," but, "All decently educated or sometimes not decently educated scapegraces, who cannot gain a footing elsewhere, become, or try to become, assistant masters in private schools." But we must ever remember that the increase of this latter class acts as a most powerful deterrent to other and better men from entering into the prosession. If I speak as a teacher, I must also feel as a father, and must honestly assert that I should dissuade one of my own sons from seeking the post of assistant master, from this cause only.

This is, I think, a most serious and most pressing question, and one which, in the absence of all other motives, ought to weld us together into a real, living, corporate unity—that some effective steps might be taken to effect a radical reform on this point. We have no complaint about quantity—but about quality; and the only way I know of improving the quality is by our first being organized into a profession ourselves, and secondly, by having a distinct and special way of entering into that profession. What private schoolmaster is there of, say, ten years' experience, who could not tell a thrilling story of his difficulties and sufferings from this one cause—a story which, from its wild improbabilities, would afford another proof of the trite axiom that truth is stranger than fiction? I must add that, so far as my own experience goes, a very marked deterioration in the *quality* of assistants has taken place within the last few years. Perhaps we may entertain the hope that matters will soon become so utterly bad that we shall arouse ourselves, and deal effectually with it.

One great drawback to our profession is often dwelt upon with remarkable pathos and unction—the difficulty of securing a good social position. I have not found any such difficulty, and I only mention this point for the purpose of asking each and all of my fellow-teachers to join me in consigning this pseudo-grievance to a quiet aud early grave. It is not a spectacle edifying either to gods or men to see teachers itinerating the country, uttering the plaintive cry, "Nobody will invite me to dinner!" If the position of schoolmaster does not secure social standing, it does not hinder it.

To bring my rambling paper to a close, I would briefly sum up the conclusion of the whole matter. Here, in the occupation of teaching and conducting a private school, I have found a work demanding the fullest exercise of all—aye, and of far more than all—the powers I possess; a work which, on the one hand, secures, I believe, as completely as any other profession, if not a princely fortune, yet a modest competence for a really competent man; and, on the other hand, tends to enrich advancing life with an ever-increasing number of attached and devoted friends, whose hearty greeting and sympathetic smile is in itself a mine of untold wealth; a work which, though not without its difficulties and drawbacks, its worries and its anxieties, is yet full of interest, of life, of nobleness, capable of exercising the mightiest intellects, and of satisfying the loftiest ambition, yet a work marred, blurred, disfigured by want of organization, of corporate unity, of professional self-respect; a work which, whatever great results it has achieved, might and would achieve far greater, if its workers were more thoroughly drilled and disciplined,—not into mechanical uniformity, but into the right use of the manifold powers and energies of many sided minds; where men and women of all kinds and degrees of competence should find a fitting home and reward, but where the door would be resolutely shut against pretentious quackery of hap-hazard ignorance and incompetency.

THE DISCUSSION.

Mr. Mitcheson, as an assistant master, felt somewhat aggrieved at the uncompromising way in which the lecturer had condemned a very large and much-enduring class of men. The difficulty of procuring good assistant masters was mainly owing to the very

small salaries which were offered, as a rule, to men who were expected to possess high education and culture. His own experience of principals of private schools went far to show that for the low state of middle-class education the chiefs were at least as much to blame as the subordinates.

Mr. Rogers said there could be no doubt as to the value of some training for teachers of secondary schools. The question was as to how it was to be provided, the time to be devoted to it, and whence the funds were to be procured. Nothing, he was convinced, was to be expected from Government. And as to the value of such a training as was afforded in the Training Colleges for elementary teachers, the results of his own experience as a trained teacher led him to believe that it was not worth the time and expense bestowed upon it. After all, sound knowledge was the primary essential; and he (Mr. Rogers) was of opinion that for one who knew his subjects, and was not quite without experience, no great amount of technical training was required. Evening lectures, such as those which had been instituted by the College of Preceptors, and which were given by men of ability and experience to practical teachers, went far to supply the want.

Mr. Marsh sympathized with the first speaker, and could from his own personal experience fully endorse the views he had expressed. The pay of the assistant master was, as a rule, miserably low; and yet much was expected. It lay with principals of schools to bring about such a measure for the registration of teachers as would exclude the incompetent, and improve the position of capable men.

Mr. Gayfer admitted the value of courses of lectures on the Theory and Practice of Education; but how were teachers, scattered all over the country, to avail themselves of advantages which must almost necessarily be confined to those working in large towns? Much, however, he believed, might be done by a careful study of works on school management and methods, such as those of Dunn, Gill, and others.

Mr. Mast said that the lecturer was, in fact, a trained teacher. The University course was extremely valuable in the way of preparation for teaching, though of course it was not all that was required. He (Mr. Mast) was of opinion that the man actually engaged in the work of education was best fitted to profit by the experience of others, and that technical knowledge could be readily acquired by one who was anxious to improve his method. The true schoolmaster was a real artist; he was ever learning, and his training could never be regarded as completed. Mr. Maurice's saying was a pregnant one, but required a word of caution in its application. To attempt to make the pupil entirely his own teacher was a dangerous error, and must issue in failure: were it not so, there would be small need of trained teachers.

Mr. Waymouth agreed with a previous speaker, that the time of training in the Government colleges was too long, and he sketched a scheme according to which training, practice, and examination might be carried on together, and be followed by registration, without which no one should be allowed to set up a school. The present was a time of severe struggle for "private adventure" teachers; but he believed that, with faithfulness and perseverance, their difficulties would finally be overcome, and they would attain the position to which they were entitled.

Mr. Langler heartily sympathized with private teachers, having himself been one, before entering the Training College and the special field of elementary education. In regard to training, the main object was to secure for the young and inexperienced the advantage to be derived from the experience and instruction of eminent masters of the art of teaching. "Masters of method" were required, who could point out and illustrate the essential principles of teaching, and show the causes of failure, and the means by which they might be overcome and waste of power prevented. It was true that the best training and instruction could not *make* a teacher, or supply the want of the true motive power; but where the faculty existed, the gain would be great. It was with the elementary subjects that the greatest difficulty was experienced, and in most cases it was precisely to the raw and untrained that was committed the task of laying the foundation, necessitating on the part of the more advanced teacher the undoing of much that had been badly done.

Rev. P. Magnus said that no amount of technical training could make up for want of knowledge. First the knowledge should be secured, then the methods of imparting it could be acquired. An important part of the equipment of a teacher was a sound knowledge of mental and moral science, and the College had recognized this in making mental science a necessary part of its examinations for diplomas. The remarks which had fallen from some of the speakers tended to show the risks that parents ran in sending their children to schools in which the teaching was not periodically tested by some trustworthy body. It was not sufficient that a few boys or girls should be sent in for examination; but the school as a whole should be carefully tested on the spot by intelligent and experienced visiting examiners.

The Chairman, in summing up the discussion, said that the question was simply as to the advantage of a definite professional training over the mere haphazard training afforded by the alternate success and failure of unaided experience. There were many illustrious examples of successful teachers who had received no such professional training, but who had worked their way through all obstacles, and had attained to clearness and strength. But was there any necessity that the work should be done over again in each particular case, and that the dearly-bought lessons of experience should not be made available for the guidance of those that came after? Eminent teachers were themselves found lamenting the mistakes they had made, and the waste of power involved in carrying out the process of trial and error, and were anxious that young teachers might have the benefit of their experience. Practical schoolmasters could best help themselves in this matter, and need not look to the universities to supply what these bodies did not possess. The study of mental philosophy was of itself of small account. To earnest men and women, actually engaged in the work of teaching, lectures on the principles and art of teaching by men of proved ability and experience were of real value; they were at once able to put the lessons into practice, to test their utility, and make them the starting points for further progress. Much also could be effected by means of conferences and discussions by practical teachers. Earnestness, and zeal, and enthusiasm, were contagious, and the necessity could not be too much insisted on of fostering high views of the teacher's calling.

THE ETIQUETTE OF TEACHING.

BARTON HEALY.

IN and out of school, the teacher should avoid the company of persons who refuse him the respect due to his station, and should train himself to be able to do without them. The plea of having no one else with whom to associate is worth very little, even when urged in strict accordance with truth. If you observe this rule, you shall rise; if you violate it, you shall fall.

Be careful how you do anything unusual before children. They will speak of it in other places, and, without intending harm, give an imperfect or distorted account of the transaction, leaving out some salient point or perhaps that which is the most important incident of all.

If it be worth your while to make a rule it is worth your while to observe it. If you make many rules one will interfere with the other. It may sometimes happen that you yourself will forget one of them, and that the children, noticing the fact, will put you in mind of it. This, you must admit, would be very disagreeable. There are many little things done in school, of no harm in themselves, but inconsistent with perfect order. If you forbid these you are bound to take care that they do not occur again; or, if any of them be repeated, to punish, in some way, the disobedience. You will find it, almost without exception, the case that they take place at the time some matter of real and pressing importance claims your attention, and when, of course, you are not at liberty to deal with them. Before making a rule against a petty thing, consider whether or not the good resulting from its discontinuance would repay you for the time lost, the labor expended, and the severity required in putting a stop to it, and also whether it is a thing likely to fall into disuse as general good order advances.

Do not allow yourself to fall into the habit of giving, unasked, a reason or an explanation for every thing you do or require to be done; do not train the pupils to expect it. It is not necessary, and you would find it very inconvenient at times. Besides, there are many persons to whom explanations sound very much like excuses. This does not apply to the subjects you teach, or to occasions when new plans are to be introduced or important changes effected.

It is a great advantage to bear in mind fully and clearly the occurrences of yesterday and former days. To be able to recall, as occasions require, every particular, proves solicitude for the welfare of your pupils, and strengthens your influence with them. They have so little of importance to think about, except "school," that they cannot understand how the teacher could forget anything connected with it.

An imprudent teacher stretches his authority to persons and things that are not under his control, provoking and encountering opposition. Some persons yield to him, but while yielding revile him; others resist, and he, being powerless to enforce obedience, is discomfited. Discomfiture of this kind—of any kind—lessens a teacher. You may have read that, "To govern others you must govern yourself." It is a truth of which teachers should never lose sight; and in your case this self-governing means, not only controlling the temper, but in everything else keeping within bounds of the duties of your office. So long as you confine yourself within the sphere of your labors, it forms your proper protection: but, as soon as you go beyond it, you expose yourself to injury and offence.

Centre in yourself the authority of your school; the possession of it makes you more useful to your pupils, and less troublesome to your superiors. You cannot have an orderly school while you favor the boy who is above his fellows in height or age—while you connive at, or suffer to pass unpunished in him, sayings or doings that you would not permit in another. Such an one is more likely than any of the rest to take liberties; and it happens in many cases– from indolence or want of confidence on the teacher's part—that his assumptions meet but feeble resistance. The teacher should reflect that his duty to himself and the pupils requires him to act with a moderate share of resolution: and, when he neglects to do this, he must be prepared to pay the penalty of his unworthy conduct. Children sometimes appear to suppose that, as long as they are submissive to their teacher, they may be as rude and as insolent as they please to other persons; every sensible teacher will abstain from anything likely to foster such an opinion, and be careful not to excuse violence in speech or action on the ground that it was caused by zeal for the welfare of the school.

When a boy wishes to have a joke with you, or at your expense, he may, perhaps, speak out in public some unkind thing that has been said of you, or he will make some silly complaint, for the purpose of causing a

laugh. His aim is to discover how far he can humbug or play upon you, rather than to annoy and offend. The present, however, is the time to stop him; it will not be necessary to use corporal punishment, but you must discountenance the proceeding in an unmistakable manner.

It is unwise to display partiality for children that are favored by nature or by fortune, in good looks or in the easy circumstances of their parents. If favor be shown to any, those who, from obvious causes, may expect but a small share from others, have the best claim upon you. Some years ago, it was a common thing to seek out a little child of precocious talents, and by petting and cramming, force him to become a juvenile prodigy of learning—an "infant phenomenon." It may still prevail to an inconsiderable extent, though the probability is, that at the present time it does not occur at all. However, as it is one of those mistakes into which the inexperienced and enthusiastic teacher of any period is liable to fall, mention may be made of it as a most objectionable course, and one ever sure to injure all the parties concerned in it. The teacher and the school feel its bad effects for a short time only; but the other, the unhappy little mortal who plays the leading part, suffers for years. And the painful process of undeceiving him—a process never thoroughly effected—leaves him no inclination to return to study in the ordinary fashion.

Bear in mind this saying—"He that favors is unfit to rule." Little need be added on this subject. Every child in the school, no matter what are his dispositions, his habits, or his circumstances, is entitled to the full measure of fair play. Of course, this fair play or justice does not forbid you to recognize and commend deserving pupils. But when a teacher, without regard to merit, singles out one of them for his companion, and uses him as a spy, or as a person to be spoken to when speaking of or, as is sometimes said, talking at the rest, he reveals a weakness, and shows that he is but imperfectly qualified to govern children. It is unfair to set any child as a spy upon his schoolfellows. The person so employed, if continued in office any length of time, will, after the manner of favorites, presume upon his patron and give offence. Sooner or later he must be degraded and punished; and from that time he will look on the teacher with dislike, justly regarding him as the author of his disgrace. If you desire to govern your pupils with ease and credit, you must not favor any of them. So long as your measures have no object other than the securing of what is agreeable to yourself, and conducive to your own ease, so long will you be at strife with your class.

And now, a very few words on the most unpleasant topic discussed in the pages—the annoyance teachers suffer out of school from pupils and others. To pass it over without comment could serve no good purpose. The better course is to examine the evil calmly, and enquire how it may be remedied, and to what extent. When assailed by persons who have never attended his school, it ought to give him very little concern, since he is in no way accountable for their misconduct. But if those who offend him are, or have been, under his care, he should at once perceive and acknowledge that the cause of the grievance is his own faulty management; and further, that while he pursues an arbitrary and unreasonable line of conduct in school, where, in a great measure, the children are in his power, he must expect that—upon obtaining the mastery, as to a like extent they do, on leaving school, and meeting him in public—they will repay his injustice with interest. They will call aloud after him in the streets, chalk his name upon gates and walls, coupling with it ill-chosen adjectives, and perhaps adding his caricature.

Journal of Education, Quebec.

STATE AND DENOMINATIONAL SCHOOLS.

J. T. VALENTINE.

THE *Christian Advocate and Journal* of August 23d contains an article, presumably from the pen of C. H. Fowler, D. D., under the above caption, which, while it professes to give and take, gives so little and takes so much that it may be fairly considered an attack along the whole line against the common school system. The article, like everything from the pen of this vigorous writer, is a clear and forcible presentation of the subject; and the fact that it is to be understood as an official expression of the views of a leading denominational paper, gives it additional importance.

Although the writer deduces from his argument eleven general conclusions, we think they can, without injustice to his views, be reduced to three, as follows:

1. The state has no right to tax the poor man to exalt the rich man's son.

2. The state has no ability to care for our children in the midst of their higher studies.

3. The state has no right to tax church property and denominational trust funds.

The argument from which the first conclusion is drawn, is directed only against schools of advanced grade, in support of which taxation by the state is designated as a *species of legalized robbery.* Elsewhere the writer expresses himself in favor of the public maintenance of common schools of a very low order. We quote his views on this point very tersely, as follows:

The common schools come under another principle. So far as they are common they touch the rudiments of knowledge necessary to qualify a man for the common duties of life. This knowledge of the common branches is necessary to the safety of the state, and so the state has a right to provide this instruction, and require the citizen to avail himself of it. Beyond these rudiments the right ceases, and taxation becomes robbery.

Here we have two extreme views brought into close proximity and relation. Up to a certain point, which the writer wholly fails to establish or determine, the state is bound to provide and maintain elementary schools by taxation, and force attendance on the same by compulsory laws; but beyond that point, should the state attempt to go in the same direction, it ceases to be a public benefactor and becomes a public robber.

When does this wonderful transformation take place? Is it when instruction ceases to be elementary? That point is never reached in our American system, even in the most advanced institutions of learning ever established and maintained exclusively by the state. Had the writer established his point where elementary merges into polytechnic and professional schools, he would have a well-defined and reasonable classification, and his proposition would receive universal consent; but who ever heard of a proposition in this country to establish public schools of engineering and mining, or medical and law colleges? Such a perversion of the use of taxes levied for the maintenance of public schools would indeed justify the application of the term "a species of legalized robbery," and would alone give consistency and meaning to the writer's conclusion that "*The state has no right to tax the poor man to exalt the rich man's son.*"

The true solution of this objection, familiar to every experienced tax-collector, will be found in what we have designated the second conclusion reached by the author of the article in question, namely, that "*The state has no ability to care for our children in the midst of their higher studies.*"

It is when our boys and girls arrive at a proselyting age that the state changes from a public benefactor to a public robber, and filches the money of the *poor man to exalt the rich man's son.* It is not that the state is no longer able to care for their secular, and even, to a certain admitted extent, their moral education; but our boy has now got to an age when he can begin to exercise some independent thought upon questions brought to his attention; and it is the fear that he may not have the requisite amount of denominational theology crammed into him, or that he may get hold of the wrong brand, that so alarms the conscience of the church.

Again let the article speak for itself:

The results of instructions in these State schools are sad comments on their tendencies. The young men return with fair intellectual culture, generally with the average morals of the times, but too frequently with utter loss of spiritual life, and with the foundation of their faith badly shaken or wholly shattered. Of a large number of students sent through a series of years to a State University from Methodist families, less than ten per cent. of them were returned to Methodism fit for the uses of the Church. It may be said that that is not necessarily an evil; but we answer that to us it is an evil, and an immeasurable evil.

It is not the fear that the state has not the ability to care for the intellectual culture of our sons and daughters; it is not the fear even that their moral education will be neglected; but it is the danger that they will not return fit for the *uses* of a particular church, that makes it to *us* (them) such an immeasurable evil.

Elsewhere the writer says:

Observation suggests another point, obscure, but vital. It is the necessity of a *careful control of the natural science departments of a college in the interest of Christianity.* Treason in the physical laboratory may neutralize the influence of a Christian management. A skeptic or infidel in the chemical laboratory may damn more young men than a pious faculty and a sanctified board of trustees can save.

More wretched bigotry than this we have seldom heard; but when coming from a doctor of divinity and responsible editor of an influential church paper, it is a cowardly defense of Christianity and an insult to the cause of education.

How does the author of the above quotation propose to control the natural science department of a college in the interests of Christianity, except by a perversion or at least a suppression of the truth in order to make science square—not with Christianity, for truth can never be discrepant with itself—but with *his* particular notions of Chris-

tianity. Did he ever see a skeptic or an infidel in a chemical laboratory teaching his own peculiar views of religion? We think not. What he wants kept out of the chemical laboratory is the chemist—the instructor who will teach pure scientific truth for its own sake, and bring his pupils in sympathy with nature and nature's laws, without regard to the "pious faculty and sanctified board of trustees;" and what he would put in his place is the professor who will make science a secondary consideration;—one who is ever ready with manacles to shackle free thought even on scientific subjects, when he conceives some favorite theological tenet is in danger;—one who sees nothing in the law of elective affinity but a figure and type of Christian love, and nothing in the chemical union of ternary compounds but an illustration of the incomprehensible mystery of the trinity. We have no objection to interpose against any system of religious belief; but the objection lies against controling any department of science in the interest of that belief.

The third conclusion the writer reaches, is that church property and endowment funds of a church, held for purposes of education, should be exempt from taxation by the state. He says:

> While the state has no right to tax for the maintenance of universities and colleges, it is also prevented by honor from violating its contract with colleges created by benevolence, in the charter of which the state has virtually said, "These funds shall be kept for the object you seek to establish." To tax these funds is to violate a trust.

This seems to be a very fair statement of a fair proposition, but it is a clear case of *petitio principii*. It assumes that the state has made a contract, actual or virtual, with the custodians of trust funds, not to tax them; but it is very clear that such a contract could only exist by virtue of positive law.

In the absence, therefore, of a statute exempting church property from taxation, there can rest upon the state no obligation to a contract such as is contemplated; and even where such laws do exist, if they are wrong, it becomes the duty of the legislature to repeal them without delay.

That such laws *are* wrong, we think will appear from the very relation subsisting in this country between the Church and the State, or rather betweenthe co-ordinate and independent church denominations and the State.

The theory of our government is to guarantee perfect freedom of religious thought and practice to every citizen; and this can be effected only by withholding all grants and subsidies and all legislative aid whatsoever from denominational bodies, and thus preserving the equality and independence of all. One of the greatest abuses of power ever known in the history of England, arose from the authority granted by Parliament to ecclesiastical bodies of holding landed property by statute of mortmain; and we in this country are fast repeating the history of these abuses.

In 1850 the total valuation of property held and owned by churches in the United States was $87,328,000; in 1860 it was $171,397,000, and ten years later, in 1870, it had grown to the enormous sum of $354,483,000. It is plain to be seen that should this rate of increase be maintained, it will not be long before a large proportion of the property of the country will be held for ecclesiastical uses; and should it be withdrawn from public taxation, the burden upon private individuals will be thereby so much increased; but a far worse result will be that a few of the leading denominational bodies — among which the one represented by the writer of the article under review occupies the front rank—would begin to manifest the arrogance of wealth and usurp the powers of the State. It is not difficult to see in the very article in question a move in that direction. It is a blow aimed from a high source of power, and with no feeble arm, at our secular school system; secular only because free, which is the strongest bulwark of the perpetuity of the freedom of our institutions.

Reading, Pa.

BEGINNING WITH THE LOG.

A BOY stood in his father's door-yard one day, looking at a pile of wood that was lying there, uncut. Some of it consisted of the trunks of large trees, and some of sapling and branches. The boy had seen a man chopping one of the logs, and had noticed how fast he did it. He thought it would be a fine thing if he had such strength. He thought how his companions would envy him, and how his father would boast of him. He resolved to cut a large log into short pieces, that very morning. So he chose the trunk of a large hickory, and began to chop. After striking a good many times, he managed to make a small chip fly off. This encouraged him, but in a few minutes he found the axe very

heavy. He could not strike where he wanted to, and there was a great knot in the log that he could do nothing with.

He concluded that it was no use to work on that log any more, and chose another. It was a maple, and was about as large as a man's thigh. He worked at this for some time, but with little better success than he had before. He then took a stick as large as a man's arm, and, by dint of hard chopping, cut a little way into it, but his strength gave out and he had to stop and rest. Finally, he chose a small stick no larger than his wrist, and, after some time, cut it in two. He was very tired; his arms and back ached; he had cut only one stick, and just then he heard the clock in the house strike twelve. His morning was gone, and he had accomplished nothing.

Many persons who have had few advantages, enter school resolved to accomplish great things in the way of study. They have seen some fine scholar; they admire his attainments, and wish to gain a knowledge of those things in which he excels. They are too impatient to take the first steps. They want to do something that will *show*. So they choose some science—astronomy, for instance—and begin to study. They soon come to some principle which involves a knowledge of the higher mathematics. They can do no more, and they abandon astronomy in despair.

Then they go to work at mathematics. They want to enter advanced classes. Without a thorough knowledge of the fundamental rules of arithmetic, they join a class who are solving problems in interest. Without a thorough acquaintance with the first principles of algebra, they join a class who are somewhat advanced in it. In both studies they fail, and give up mathematics as they did astronomy.

Perhaps they want to study intellectual philosophy. Their minds are undisciplined, they have never tried to carry on a train of thought for any definite purpose. They begin with a class who have been studying for some time, and are soon left far behind. They grow confused and weary in mind, and at length leave the class.

Then they try composition. They do not want to write too simply, so they choose a subject that requires a great deal of careful thought, and begin to write. They do not think long enough to gain a clear idea of their subject and of what they want to say about it. They have not an accurate knowledge of the structure of their language. The composition, when finished, is a mass of thoughts confusedly brought together. There is no connection between some of them and the subject. The sentences in which they are expressed are feeble and obscure; the work is a failure.

Finally, these ambitious students begin where they ought to have begun first—at the beginning. They study the laws of their language; they do not disdain the first principles of arithmetic; they are content to begin with the alphabet of thought. In due time they master these. But the days, perhaps the months, have flown. They are tired of study; they have made little progress. They began with a log, and ended with a sapling. Their morning has been spent to little purpose.—*Exchange.*

THE LITTLE STOW-AWAY.*

A STORY FOR BOYS.

"AY, ay, sir; they're smart seamen enough, no doubt, them Dalmatians, and reason good, too, seein' they man half the Austrian navy; but they're not got the seasonin' of an Englishman, put it how yer will!"

I was standing on the upper deck of the Austrian Lloyd steamer, looking my last upon pyramidal Jaffa as it rises up in terrace after terrace of stern gray masonry against the lustrous evening sky, with the foam-tipped breakers at its feet. Beside me, with his elbow on the hand-rail, and his short pipe between his teeth, lounged the stalwart chief-engineer, as thorough an Englishman as though he had not spent two thirds of his life abroad. He delighted to get hold of a listener, who—as he phrased it—"had been about a bit."

"No; they ain't got an Englishman's seasonin'," he continues, pursuing his criticism of Dalmatian seamen; "and what's more, they ain't got an Englishman's pluck neither, not when it comes to a real scrape."

"Can no one but an Englishman have any pluck, then?" asked I, laughing.

"Well, I won't just go for to say that; o' course a man as is a man 'ull have pluck in him all the world over. I've seed a Frencher tackle a shark to save his messmate; and I've seed Rooshan stand to his gun arter every man in the battery, barrin' himself, had been blowed all to smash. But, if yer come to that, the pluckiest fellow as ever I seed warn't a man at all!"

"What was he then? a woman?"

"No, nor that neither; though, mark ye, I don't go for to say as how women ain't got pluck enough too—some on 'em at least. My old 'ooman, now, saved me once from a lubber of a Portigee as was just a-goin' to stick a knife into me, when she cracked his nut with a handspike. (You can hear her spin the yarn yourself, if you likes to pay us a visit when we get to Constantinople.) But this un as I'm a talkin' on was a little lad not much bigger'n Tom Thumb, only with a spirit of his own as ud ha'

* From Butler's Literary Selections, No. 2.

blowed up a man-o'-war a'most. Would ye like to hear about it?"

I eagerly assented; and the narrator, knocking the ashes out of his pipe, folds his brawny arms upon the top of the rail and commences as follows:

"'Bout three years ago, afore I got this berth as I'm in now I was second-engineer aboard a Liverpool steamer, bound for New York, There'd been a lot of extra cargo sent down just at the last minute, and we'd had no end of a job a stowin' it away and that ran us late o' startin'; so that altogether, you may think the cap'n warn't in the sweetest temper in the world, nor the mate neither; as for the chief-engineer, he was an easy-goin' sort of a chap as nothing on earth could put out. But on the mornin' of the third day out from Liverpool, he cum down to me in a precious hurry, lookin' as if somethin' had put him out pretty considerably.

"'Tom,' says he, 'what d'ye think? Blest if we ain't found a stow-away.' (That's the name, you know, sir. as we gives to chaps as hides theirselves aboard outward-bound vessels, and gets carried out unbeknown to everybody.)

"'The dickens you have?' says I. 'Who is he and where did yer find him?'

"'Well. we found him stowed away among the casks for'ard; and ten to one we'd never ha' twigged him at all, if the skipper's dog hadn't sniffed him out and begun barkin'. Sich a little mite as he is, too! I could ha' most put him in my baccy-pouch, poor little beggar! but he looks to be a good plucked un for all that.'

"I didn't wait to hear no more, but up on deck like a sky-rocket; and there I did see a sight and no mistake. Every man-Jack o' the crew, and what few passengers we had aboard, was all in a ring on the fo'c'stle, and in the middle was the fust-mate, lookin' as black as thunder. Right in front of him lookin' a reg'lar mite among them big fellers, was a little bit o' a lad not ten year old—ragged as a scare-crow, but with bright, curly hair, and a bonnie little face o' his own, if it hadn't been so woful thin and pale.

"But, bless yer soul! to see the way that ar little chap held his head up, and looked about him, you'd ha' thought the whole ship belonged to him. The mate was a great hulkin' black-bearded feller with a with a look that 'ud ha' frightened a horse, and a voice fit to make one jump through a key-hole; but the young un warn't a bit afeard—he stood straight up, and looked him full in the face with them bright, clear eyes 'o his'n, for all the world as if he was Prince Halferd himself. Folk did say arterwards"—lowering his voice to a whisper—"as how he comed o' better blood nor what he seemed; and for my part I'm rayther o' that way o' thinkin' myself; for I never yet seed a common street-Harab—as they calls them now—carry it off like him. You might ha' heerd a pin drop, as the mate spoke.

"'Well, you young whelp,' says he in his grimmest voice, 'what's brought you here?'

"'It was my step-father as done it,' says the boy in a weak little voice, but as steady as could be. 'Father's dead and mother's married again, and my new father says as how he wont have no brats about eatin' up his wages; and he stowed me away when nobody warn't lookin', and guv me some grub to keep me goin' for a day or two till I got to sea. He says I'm to go to Aunt Jane, at Halifax; and here's her address.' And with that, he slips his hand into the breast of his shirt and out with a scrap o' paper, awful dirty and crumpled up, but with the address on it right enough.

"We all believed every word on't, even without the paper; for his look, and his voice, and the way he spoke, was enough to show that there warn't a ha'porth o' lyin' in his whole skin. But the mate didn't seem to swallow the yarn at all; he only shrugged his shoulders with a kind o' grin, as much to say, 'I'm too old a bird to be caught by that kind o' chaff;' and then he says to him, 'Look here, my lad; that's all very fine, but it won't do here— some o' these men o' mine are in the secret, and I mean to have it out of 'em. Now, you just point out the man as stowed you away and fed you, this very minute; if you doan't, it'll be the worse for you!'

"The boy looked up in his bright fearless way (it did my heart good to look at him, the brave little chap!) and says, quietly, 'I've told you the truth; I ain't got no more to say.'

"The mate says nothin', but looks at him for a minute as if he'd see clean through him; and then he faced round to the men, lookin' blacker than ever. 'Reeve a rope to the yard!' he sings out, loud enough to raise the dead; 'smart now!'

"The men all looked at each other, as much as to say, 'What on earth's a-comin' now?' But aboard ship, o' course, when you're told to do a thing, you've got to do it: so the rope was rove in a jiffy.

"'Now, my lad,' says the mate in a hard, square kind o' voice, that made every word seem like fittin' a stone into a wall, 'you see that 'ere rope? Well, I'll give you ten minutes to confess; and if you don't tell the truth afore the time's up, I'll hang you like a dog!'

"The crew all stared at one another as if they couldn't believe their ears, (I didn't believe mine, I can tell ye,) and then a low growl went among 'em, like a wild beast awakin' out of a nap.

"'Silence there!' shouts the mate in a voice like the roar of a nor'easter. 'Stand by to run for'ard!' as he held the noose ready to put it round the boy's neck. The little feller never flinched a bit; but there was some among the sailors (big strong chaps as could ha' felled an ox) as shook like leaves in the wind. As for me, I bethought myself o' my little curly-haired lad at home, and how it 'ud be if any one was to go for to hang him; and at the very thought on't I tingled all over, and my fingers clinched their-selves as if they was a-grippin' somebody's throat. I clutched hold o' a handspike, and held it behind my back all ready.

"'Tom,' whispered the chief engineer to me, 'd'ye think he really means to do it?'

"'I don't know,' says I, through my teeth; 'but if he does, he shall go first if I swings for it.'

"I've been in many an ugly scrape in my time, but I never felt 'arf as bad as I did then. Every minute seemed as long as a dozen; and the tick o' the mate's watch, reg'lar, pricked my ears like a pin. The men were very quiet, but there was a precious ugly look on some o' their faces: and I noticed that three or four on 'em kep' edgin' for'ard to where the mate was, in a way that meant mischief. As for me, I'd made up my mind that if he did go for to hang the poor little chap, I'd kill him on the spot and take my chance.

"'Eight minutes,' says the mate, his great deep voice breakin' in upon the silence like the toll o' a funeral bell. 'If you've got anything to confess, my lad, you'd best out with it, for yer time's nearly up.'

"'I've told you the truth,' answers the boy, very

pale, but as firm as ever. 'May I say my prayers, please?'

"The mate nodded; and down goes the poor little chap on his knees and puts up his poor little hands to pray. I couldn't make out what he said (fact, my head was in sich a whirl that I'd hardly ha' knowed my own name,) but I'll be bound God heard it, every word Then he ups on his feet again, and puts his hands behind him, and says to the mate quite quietly, 'I'm ready!'

"And then, sir, the mate's hard grim face broke up all to once, like I've seed the ice in the Baltic. He snatched up the boy in his arms, and kissed him, and burst out a-cryin' like a child; and I think there warn't one of us as didn't do the same. I know I did for one.

"'God bless you, my boy!' says he, smoothin' the child's hair with his great hard hand. 'You're a true Englishman, every inch of you: you wouldn't tell a lie to save your life! Well, if so be as yer father's cast yer off, I'll be yer father from this day forth; and if I ever forget you, then may God forget me!'

"And he kep' his word, too. When we got to Halifax, he found out the little un's aunt, and gev' her a lump o' money to make him comfortable; and now he goes to see the youngster every voyage as reg'lar as can be; and to see the pair on 'em together—the little chap so fond of him and not bearin' him a bit o' grudge—it's 'bout as pretty a sight as ever I seed. And now, sir, axin' yer parding, it's time for me to be goin' below; so I'll just wish yer good night."

OUR HIGHER EDUCATION.

THE UNIVERSITY OF PENNSYLVANIA.

"We live in deeds, not years; in thoughts, not breaths;
In feelings, not in figures on a dial.
We should count time by heart throbs. He most lives
Who thinks most, feels the noblest, acts the best: * *
Life is but a means unto an end." *Festus.*

SUCH were the sentiments of Dr. Benjamin Franklin, ever on the alert for an opportunity to benefit his fellow-men and promote their welfare, and they prompted him to exert himself to establish an institution that should give to the youths of the province the blessings of a liberal education. His first effort was to organize a Board of twenty-four Trustees to direct the affairs of the proposed college, and raise funds for its endowment and maintenance. In this he was successful, and the first meeting was held Nov. 13, 1749. It was succeeded in 1751 by the erection of a building at Fourth and Arch streets, known as the Academy, where they taught Latin, English and Mathematics, by Chas. Thompson and his associates. A charter was obtained on July 13, 1753, and the curriculum soon extended to include Logic, Rhetoric, Natural and Moral Philosophy and Greek, with Rev. Wm. Smith as Provost.

The power of conferring degrees was granted by an amended charter issued June 16, 1755, from which time the institution dates its career as a regularly organized college. Its endowments and reputation increased so rapidly that within two years there were 300 pupils, and in 1763 the number had grown to 400, and this in the face of a population limited in number and property and with very inferior means of communication.

This success was due chiefly to the intelligence, ability and energy of the Professors then constituting the faculty, which was organized as follows: Provost, Rev. William Smith; Vice Provost, Rev. Dr. Francis Allison; Prof. of English and Oratory, Rev. Ebenezer Kennersley; Prof. of Languages, Paul Jackson; of Mathematics, Theophilus Grew, who dying in 1759 was succeeded by Hugh Williamson. Dr. Shippen began a course of lectures on Medicine in 1764, and on the 3d of May of the following year a Department of Medicine was organized with Dr. Morgan at its head.

The college continued to flourish until the declaration of war with England, when it declined, and during the occupation of Philadelphia by the British it was entirely suspended, from June, 1777, (one hundred years ago) to Sept., 1778, but was reopened after the evacuation. Soon, however, a strong partisan spirit manifested itself, and some of the Trustees and Professors who had sworn allegiance to King George III., becoming Tories, the Assembly was led to interfere, and in September, 1779, an act was passed abrogating the charter and removing the Trustees and Officers. It was then taken possession of by the Legislature and called the University of Pennsylvania.

Under the new régime it so languished that it was soon restored to its original possessors, the Trustees, only fourteen of whom were left out of the twenty-four; and of the founders, Dr. Franklin alone survived. The State, however, retained a voice in the management, and by resorting to vigorous measures the institution was kept alive, but did not prosper, for its income was derived chiefly from confiscated estates, and public attention was absorbed in repairing the evils of a long war, and in establishing a government for the country.

A law school was organized in March, 1800, and the building erected for a residence for the President of the United States, at

Ninth and Chestnut streets, at a cost of $100,000, was purchased by the Trustees for $41,650, and the University removed thither in the spring of 1802. From this date it "dragged its slow length along," while gradually recovering strength, until September, 1872, when, under the efficient management of an interested Board of Trustees and an active Provost, new buildings were erected on spacious grounds in West Philadelphia, one of the most beautiful suburbs of the city. These buildings, with the grounds and fixtures, valued at $1,500,000, are among the most attractive and appropriate of their kind in the country, and are especially designed to meet the requirements of a University Education in its broadest sense.

At the time of this removal the entire organization was remodeled, new Professors and Instructors appointed, the requirements for admission raised, and very many valuable additions made to the libraries and cabinets for practical demonstration, the details of which can here be only partially given.

The governing body is composed, as at first, of twenty-four Trustees, among whom are found men whose names will be distinguished a century hence, as are those of the original founders at the present time. This honorable body is presided over by His Excellency, Jno. F. Hartranft, Governor of Pennsylvania. The Board has organized departments for instruction in Arts or Classics, Sciences, Medicine, Philosophy, Law and Music, and have elected some fifty or sixty professors and assistants to fill the chairs of these branches. Rev. Charles J. Stillé, LL. D., is the Provost of the University, and Rev. Charles P. Krauth, D.D., LL. D., is the Vice-Provost. Among the professors there are a number of gentlemen who are widely known both in this country and abroad as scholars and experts in their several departments.

The aims of the several departments may be briefly stated as follows:

The Department of Arts is designed mainly to give that comprehensive and liberal culture, and to secure that mental training and discipline which was until recent years the sole aim of the best known American colleges.

The Towne Scientific School, while not neglecting the general liberal education of the student, aims chiefly to teach him the principles of natural and physical science with their application to the arts of life. For this purpose it is subdivided into six courses of study, viz.:

1. Chemistry and Mineralogy, under Dr. F. A. Genth, State Chemist.
2. Geology and Mining, under Prof. I. P. Lesley, State Geologist.
3. Civil Engineering, under Prof. L. M. Haupt, in charge of the Geodesic Survey of the State.
4. Mechanical Engineering, under Prof. Wm. D. Marks, Ph. D., (Yale.)
5. Architecture, under Prof. T. W. Richards, Architect.
6. A General Course.

In all the above courses the work is so arranged as to furnish frequent opportunities to the students to operate in the chemical and physical laboratories, workshops or in field practice, as well as to visit the shops and important public works in the vicinity.

For the Department of Medicine, the Trustees have erected on Thirty-sixth street, south of Locust, a hall of very large dimensions, which has been arranged for the convenient accommodation and instruction of students in accordance with plans based upon long experience here. It is fully provided with all the approved means of research and investigation. Adjoining this building a large University Hospital has been erected, which is placed in charge of the Medical Faculty. This Hospital is, of course, an invaluable means of clinical instruction. The Medical Hall and the Hospital are now completed, and medical instruction is given to the students in both of them.

The Department of Law has been recently reorganized with a view of enlarging its aims and rendering more systematic the instruction given by it.

Besides the Lectures of the Professors in the Departments of Medicine and Law, lectures on the following subjects are given to the students in the Department of Arts and the Towne Scientific School, viz.:—

On the International Law and American History, by Provost Stillé.

On Systems of Intellectual Philosophy, by Vice-Provost Krauth.

On Social Science and National Economy, and on the History of Civil Law, by Professor Thompson.

On English Philology, by Professor McElroy.

On Physics and Astronomical Physics, by Professor Barker.

On Inorganic and Organic Chemistry, by Professor Sadtler.

On Mineralogy, by Professor Genth.

On Geology, by Professor Lesley.

On Engineering and Contracts, by Prof. Haupt.

On Metallurgy and Applied Chemistry, by Professor Kœnig.

On French Literature, by Professor Bregy.

Lectures on the Science of Music are delivered twice a week by Professor Clark to such persons, members of the University and others, male or female, as may desire systematic instruction on this subject. This instruction will include Harmony, Counterpoint, and Composition, with as much of the history of music as may be necessary to illustrate these subjects.

The Degree of Bachelor of Music will be conferred on those who attend two courses of lectures and pass satisfactory periodical and final examinations thereon. The other degrees conferred are those of B. A.; B. S.; M. D.; Ph. D.; LL. B.; M. S.; and A. M.

To extend the benefits of the University it was recently decided by the Trustees to admit women to all the privileges of the undergraduates in the Departments of Arts and Sciences, so that it may with truth be said that this venerable institution, having shaken

off her lethargy and renewed her youth, is now prepared to do her whole duty to the community, to her benefactors and patrons, and to sustain the exalted reputation bequeathed her by her illustrious founder, Dr. Franklin.

The present force of 52 professors and assistants, with 922 students, is but an earnest of the work to follow. These are distributed to the Departments of Arts 12 professors, Science 14, Medicine 11, Medicine (Auxiliary Faculty) 5, Medicine (Hospital) 11, Law 5, Comparative Philology 1, Music 1, Emeritus Professors 2,—making in all sixty-two, of whom nineteen give instruction in more than one department. The Department of Arts has one lecturer and instructor, that of Science has five. There are three teachers in the Charity Schools. In the Department of Arts there are 131 students, Science 105, Medicine 467, Medicine (Auxiliary) 127, Law 91, and Charity (English) Schools 101,—making a total of 922 students.

Thus the University begins the one hundred and twenty-fifth year of her existence, and speeds on towards the goal of her ambition, a higher life and more extended usefulness.

HOW TO KEEP BOYS AT HOME.

"I WISH you boys loved to stay at home in the evening," said a mother in my hearing last night; and the sigh and look of distress which accompanied her words told plainly that her heart was deeply pained by their oft-repeated absence, as she watched their retreating footsteps with a troubled countenance, and knew not what might be the company they sought, nor what evil influence might be thrown around them. They were industrious boys of sixteen and eighteen, just beginning to fancy they were too large and too old to be subject to parental authority. They were not vicious or idle, but worked with a willing hand through the day, doing the work of men; but when evening came they sought pleasure abroad, unmindful of a father's advice or a mother's entreaty. I glanced around their home, a comfortable, farmer-like dwelling, where all the wants of of the physical nature were well supplied, but, as is often the case, the food for the mind was less abundant. A few school-books, which the boys had never learned to love, a Bible, and a hymn-book, constituted the family library; and I was not surprised that they should leave the circle at home, and seek the cheerful throng that was lounging at the store, or join the vulgar mirth and profane jests that went around the boisterous group. A few dollars judiciously expended in books and engravings suitable for young children, will do much to awaken a love of home; and I venture to assert, there is nothing which will have a stronger influence in keeping "those boys" quietly at home, than to cultivate a taste for reading.

Begin early. Read to them before they can read for themselves; explain what you read, and encourage them to converse with you about it. Teach them to observe the common phenomena of nature, and to study into the causes which produce the effects they see. A mother may do this herself without being a philosopher. She may awaken their curiosity upon the various objects around them, and direct them where this curiosity may be gratified; place within their reach useful and instructive books, and show by example as well as by precept that she appreciates them; and the pleasures of home will be purer and sweeter to every member of the family, and the children will seldom have occasion to seek evening amusements away from the charmed circle of home. It has been truthfully said, "a good book is the best of company," and the earlier we introduce our children into the society of good books, the greater will be the benefit derived from them; and the stronger will be their attachment to the social circle around the evening fires, and there will be less danger of their seeking diversion in the society of the idle and vicious. But if you neglect to make home happy, and to furnish entertainment for the intellect, be assured that the restless desire of the human mind for "some new thing," will frequently attract "those boys," and girls, too, away from home in search of amusement.

THE MICROSCOPE IN SCHOOL GOVERNMENT.

MRS. M. B. GOODWIN.

THE school at Maple Grove had been called to order. Every scholar was in his place, and for once there was not a whisper heard; whispering had, from time immemorial, been the bane of Maple Grove School. Teacher after teacher had tried to conquer the habit, and with the advent of every new one, the dunce-block and birchen rod had been introduced as a part of the

programme—a part, however, that always failed to accomplish the desired end; and, up to the present hour, the school really deserved the name it bore—the most disorderly school in the country.

The present teacher was a little pale-faced lady, and the older boys chuckled at the thought of such a mite of a woman attempting to coerce them, and at the morning recess they met in solemn conclave, and nicknamed her "The Giant." Miss Dean, as it happened, overheard the deliberations of the irrepressibles, but, instead of being alarmed, she was rather amused, especially at the ludicrousness of the cognomen they had chosen for her *four feet of stature.*

The morning passed without any unusual confusion, considering the perplexing nature of the first day's duties; and now, as I said, a hush had fallen on every scholar—every mouth was agape with wonder, and every eye fixed on the little woman at the desk. Instead of a rod or a ferule, she held in her hand a brass instrument looking for all the world like a toy cannon set on end. Silently she held it up before the school, and silently the scholars gazed, until little Johnny Burns could repress his curiosity no longer, and in a shrill voice cried out: "School-marm, will it *shute?*"

The teacher raised the instrument higher, and a smile was perceptible on her face, as two or three of the ringleaders of mischief popped their heads behind their desks, not a doubt being left in their minds that if Miss Dean wasn't strong-bodied, she was, at least, strong-minded, and intended to govern the school with some new-fangled shooting machine instead of the old-fashioned good-behavior producers before alluded to.

"Did you ever see a microscope before?" asked Miss Dean; and four heads popped from behind their wooden breastworks, while every voice in the house answered in the negative. "Well, I suppose the young ladies and gentlemen who sit on those back seats have *heard* of this instrument, and can explain its use," said the teacher, with that subtle knowledge of children's dispositions, which leads them to be peculiarly flattered, when on reaching the (to them) very mature age of ten or twelve, they are, for the first time addressed as ladies and gentlemen. There was silence for a moment, and then one of the boys hazarded an opinion that "microscopes were made to see stars."

Miss Dean then explained to the school the use of the microscope, and, calling the eldest boy forward, showed him, upon a bit of glass, a tiny speck, barely perceptible. Placing this under the lens, she bade him look and describe what he saw. "Why, a huge spider, with points and bristles," exclaimed the boy, in perfect astonishment, that so small a speck should be so transformed. "Not a spider exactly," said the teacher, "though it does look like it; that is a honey-bee's sting, and every one of those hairy points which show so plainly in the glass is charged with poison. Do you wonder that the sting of the bee is painful, when such a complicated weapon is used?"

Sending this boy to his seat, she called up the next eldest. "What is that little sack that looks like his head? Is that his bag of poison?" he asked after a prolonged gaze.

"I expect it is, though outside the microscope the sting only looks like a little black dot on the glass, and you can distinguish neither hairy points nor poison bag." One by one, she permitted every scholar to look through the microscope, and as each one was impressed with some new idea, not only the bee's sting, but the habits and formation of the bee itself, were very thoroughly discussed and investigated.

Then, placing the microscope back in its green and golden box, Miss Dean made the following announcement to the school: "I propose, hereafter, to devote one hour each day to the study of insects by the aid of this microscope; but only those who obey the rules of the school will be allowed to participate in this study, or look at the wonderful construction of insects revealed by its magnifying power. If a scholar whispers, or otherwise disobeys me, he loses the privilege for the day of looking through the microscope; and I assure you, children, that the bee's sting is not the most interesting object that can be found for inspection. Every bug and worm, every fly and miller, the feathers of birds and the seed-pods of flowers, have each and all a private history, and forms of beauty unperceived by the naked eye and unsuspected save by those who have made the microscope their companion in numberless rambles through fields and groves."

Do you think Miss Dean had to press birchen branches into service in the government of that school? Did any boy have to sit on the dunce-block for not studying his lesson? No, indeed; it would be hard work for boys to remain dunces, when a microscope was one of the incentives to study; but I can assure you that sad havoc was made among the winged and creeping in

sects, and Miss Dean found herself compelled to study "*Bug-ology*" pretty thoroughly. That, however, was better than the tired fretfulness experienced by most teachers in their attempts to preserve order by the old methods. Corporal punishment is a relic of dark ages, and scholars would be better, and teachers would be happier, if microscopes were to usurp the place of whips and dunce-blocks in every school.—*Jour. of Microscopy.*

STUDY OF ENGLISH LITERATURE.

NO. VIII.

WE cannot end these brief notices of some of the principal English writers without saying, that while we enjoy intensely the exquisite works of imagination with which they have presented the world, we nevertheless look upon the teacher who neglects the scientific literature of England as very blind to his own interests, to say the least.

Huxley's "Lay Sermons" is one of the most interesting books we ever read; and, although the subject matter of the volume constitutes its greatest claim upon the reader, we know of no book written in a purer or more graceful English. It is quite worth while to read it, if for nothing but as an exercise in our noble mother-tongue.

Tyndall's "Forms of Water" and his various public scientific addresses are most delightful as well as profitable reading, which no teacher of culture should neglect.

Darwin is difficult for the ordinary reader; and to master the thought of even the simplest of his works requires so much general knowledge, that we hesitate to recommend the indiscriminate purchase of his scientific treatises. But his "Origin of Species" is probably the best to begin with.

We come lastly to Herbert Spencer, the most comprehensive intellect of the century. His "First Principles," to the reader who can follow the thought, is a work that will mark an era in the history of his mental development. But it cannot be read hastily, and much of it will have to be re-read, and that repeatedly. The student of philosophy, who has mastered this magnificent production, will not need to be urged to proceed further in the study of his author. We will only say, in conclusion, that any one who desires an acquaintance with Mr. Spencer's writings, had better begin with the admirable little treatise on Sociology, which constitutes one of Appleton's "International Scientific Series."

If what we have presented to the younger teachers of the state in these short articles should induce any considerable number of them to devote themselves more closely than before to the study of the richest and most varied of all modern literatures, that of their own language, our purpose will have been attained, and that fact will be our reward. Those who have followed us but partially even, will have attained clews which will enable them to extend their studies intelligently to an indefinite extent in the fascinating realm of English literature.

NOTE.—With this number, the brief series of articles on English literature is brought to a close. As was explained in the initiatory number, our sole object in writing them was to furnish young teachers with some clews in the selection of authors for their perusal—a guide in the formation of a library. A typographical error has here and there escaped notice, especially in the short paper on Carlyle, where "Bobus of Houndsditch" was summarily converted into "Bobus Houndsditch," and "weak people" were weakly described as "*such* people." In the main, however, what we have written has been printed correctly, and we will conclude by expressing the hope that the hasty and necessarily superficial work which we have thus brought to a close, has not proved entirely unprofitable to those for whose benefit it was undertaken.

EXAMINATION QUESTIONS.

CALIFORNIA LIST.

FIVE credits deducted for each misspelled word of the following list: Until, scholar, very, separate, syllable, grammar, many, surely, even, cities, copying, arithmetic, definition, tuition, wherefore, merry, California, which, business, annual, water, augury, balance, moral.

For each of the following misspelled, two credits deducted: Misspelled, exhilarate, pursuing, battalion, apologize, apparition, preparation, fascinate, miscellaneous, surprising, prejudicial, mimicking, appurtenance, villagers, propagate, vaccinate, ammunition, auxiliary, persuade, tyranny, definitive, pinnacle, miscalculate, inoculate, turbulent.

Two credits deducted for each mistake in spelling, in contracting, or obviously bad punctuation of the following: Can a body pare a pear with a pair of scissors The principal explained every principle in the operation The messenger arrived at Cincinnati at twelve oclock Id as lief go as stay wouldnt you Macauley the historian was a Britains essayist.

WRITTEN ARITHMETIC.—San Francisco is 37 degrees 38 minutes N. L. What is its distance in statute miles from the Equator? 2. Find the capacity or solidity of a cubical box, each edge of which is 8 feet 9 inches. Find the surface of the same box. 3. Divide 4 square yards, 5 square feet, 75 square inches by 5, and multiply the quotient by 3. 4. Bought grain at 1¾ cents per pound and sold it at 2½ cents per pound; what was my gain per cent? 5. Assuming the great valley of California to be 450 miles long and 50 broad, what would be the length in miles of the side of a square of equal area? (b) What number of farms of 160 acres each would it contain? 6. If two sections of land for every township, of 6 miles square, be given to the State for school purposes, and were sold for $1.25 per acre, what would be the amount of school fund from this source? 7. A merchant bought 800 centals of wheat at $12 per cental, and sold it immediately at $16 per cental, receiving in payment a note due in 90 days, bearing interest at 12 per cent, This note he got discounted at the Bank of California at the rate of 1¼ per cent. per month. What did he gain? 8. Write a business form of promissory note from John Doe to Richard Roe, for $150.37½, at 10 per cent. interest, on demand. 9. Cost of lumber for planking a school yard, if it takes 50 planks, each 30 feet long, 36 inches wide, and 2½ inches thick, at $40 per M. board measure? 10. Find the difference between the square root and the cube root of 9042049, carrying decimals to hundredths only.

GEOGRAPHY.—Traveling due east from San Francisco, name, in order, the States, Territories, mountain ranges and principal rivers you would cross. 2. Name the five smallest States in the Union, and compare their aggregate area with that of California 3. Why can there be but 90 deg. of latitude, while there are 180 deg. of longitude? 4. Name five rivers of South America, five of Europe, and five of Asia. 5. What are the physical causes that produce the Desert of Sahara?

READING.—When does the direct address take the falling inflection? Give an example. 2. When do answers to questions take the rising inflection? Give an example. 3. Mark accented syllables in etiquette, obligatory, vagaries, aspirant, precedence. 4. What is modulation? Name the more common tones of the voice. 5. What difference should be made between the reading of poetry and the reading of prose?

THEORY AND PRACTICE.—"What the child does *for*, and *by* himself, educates him." Why? 2. State three leading directions about school government. 3. What do you think is the object and aim of all public school education? 4. What were the main principles of teaching made prominent by Pestalozzi? By Frœbel? 5. Explain, as you would to a class, the reason why California has no summer rains.

WORD ANALYSIS.—Analyze ten of the following words, giving root, prefixes, suffixes, and literal meaning: Divide, preventive, prevaricate, sublunary, surname, resignation, reversible, democracy, superseded, improvidence, portable, composition. 2. What suffixes are used to mean "the person who?" 3. In using prefixes from *Co*, what determines the consonant joined to the prefix? 4. Write ten derivatives from the root found in *respect*, and define, literally, five of them.

MENTAL ARITHMETIC.—Cost of 120 lbs of sugar at 16⅔ cents per pound. 2. Number of ounces in ¾ of a pound of gold. 4. Cubic inches in a gallon of water. 5. Square feet in a rod square. 6. Statute miles in a degree. 7. Square inches in a surface 1½ inches square. 8. What is 200 per cent. of one-half? 9. What is the ratio of one-half to one-third? 10. What is the difference between three square feet and three feet square? 12. How many *inches* in a meter? 13. How many *grams* in five *dekagrams?* 14. How many *shillings* in *five pounds, eleven shillings?* 15. How many *quarts* in four *bushels?* 16. How many gills in three gallons? 17. How many degrees in three-fourths of the circumference of a five cent piece? 18. How many cubic feet in five cubic yards? 19. Change six hours to the decimal of a day. 20. What is one-half of two-thirds of three-fourths?

HISTORY.—Principal industry of Colonial Virginia. 2. The origin and the use of the Cotton Gin. 3. Name one of the earliest American printers. 4. When and by whom was the electric telegraph introduced? 5. Who invented the sewing-machine? 6. Give location and date of some of the Catholic Missions. 7. What did Col. Fremont do? 8. When and where was gold discovered? 9. Date of opening the Pacific Railroad. 10. Political action in connection with the admission of California into the Union.

NATURAL PHILOSOPHY.—Why does the temperature decrease as the altitude increases? 2. Why does sprinkling the streets cool the atmosphere? 3. Why does the common freezing mixture, ice and snow, produce cold? 4. What effect has the formation of ice and snow upon the temperature? 5. Why is a wooden floor colder than a carpeted one?

PHYSIOLOGY AND HYGIENE.—Explain, as to a class, how the hair turns gray by age. 2. Give some plain directions about the care of the teeth, showing the uses of the first set, or milk teeth. 3. Explain, as to a class, the healing of a flesh wound. 4. Show the necessity of frequent bathing. 5. Why are milk and brown or Graham bread the best diet for children from 4 to 15 years of age?

NATURAL HISTORY.—What is the function of a leaf? What is a double flower? How do exogens grow? 2. What is a cryptogamous plant? Name one insect injurious to the grape, the wheat plant, or the silk worm. 3. Name any insect destructive to orchards, and give the natural history of the same. 4. Give the natural history of the gopher. 5. Also of the ground squirrel, and mode of extermination.

CONSTITUTION AND SCHOOL LAW.—Who is commander-in-chief of this State? 2. Are lotteries prohibited? 3. Have all classes of people the right of suffrage? 4. Can a foreign-born citizen become President of the U. S.? 5. How may the Constitution be amended? 6. Does the law require instruction in manners and morals? 7. May beginners teach primary classes in cities having graded schools? 8. What constitutes a school year? 9. What are legal holidays? 10. Are physical exercises obligatory?

DRAWING AND MUSIC.—State some of the reasons for making instruction in drawing universal and free. 2. Why are the positions for writing and drawing not the same? 3. State two good blackboard exercises in drawing. 4. Dictate directions for drawing a square, its diagonals and diameters. 5. Draw simple, symmetrical curves, concave to a vertical axis. 6. Name some of the advantages of instruction in music in public schools. 7. Does correct training of the singing voice promote good reading? If so, how? 8. Describe the varieties of pitch. 9. Write the scale, using different varieties of notes. 10. Name the corresponding rests.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, OCTOBER, 1877.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

WE find in *La Reforma*, Madrid, Spain, a very able discourse on Horace Mann, delivered by the French professor and author, Laboulaye, before the "Franklin" Society. We hope to have it translated and to publish it in *The Journal.*

PROF. C. L. EHRENFELD, of the Department of Public Instruction, was honored with the title of Ph. D., Doctor of Philosophy, by the Board and Faculty of Wittenberg College, Springfield, Ohio, at the recent commencement of that institution. It is an honor well bestowed.

IN giving a list of the scholars' work selected by the French Commissioners to the Centennial Exposition and published in book form at Paris, we inadvertently made an omission which does injustice to one of our Normal Schools. It was that of an essay entitled, "Lessons on Things," by "Ella M.," Millersville, Pennsylvania. The translation fills nearly five pages of the French book.

ELEVEN young ladies recently graduated from the Kindergarten Normal class, conducted by Miss Burritt, at the Friends' School House, Fifteenth and Race streets, Philadelphia. All graduates of Normal schools should be made acquainted with the worth of Kindergarten culture; not so much with reference to their conducting Kindergartens as to giving them a knowledge of child-nature, and how to adapt instruction to it. Which of our Normal schools will lead the way in this matter?

THE Faculty of the State Normal School at Bloomsburg has been almost entirely reconstructed. Rev. D. J. Waller, Jr., has assumed the duties of Principal, in place of Dr. Griswold, and nearly all the professors' chairs are filled by new men. But notwithstanding the fact that these changes are apt in themselves to be damaging to the interests of a school, we are pleased to learn that the fall term of the school has opened well. The new Faculty have assumed a responsibility that will demand not only all their ability, but an unusual degree of devotion to their work.

MANY in all parts of the State will concur in the following from the *Columbia Republican:*

> Deputy State Superintendent Houck is an efficient member of the State Department of Public Instruction. He is an industrious worker, and his genial nature and fine abilities make him and his work popular. By the aid of such men this department is doing a noble work in the interests of education. These men are indeed erecting for themselves "a monument more enduring than brass."

COUNTY SUPERINTENDENT LA ROSS, of Dauphin, is again at work pushing subscriptions to *The Journal.* His was the banner county last year, and the prospect is that it will hold its place for some time to come. We do not want the name of a single director or teacher on our list who does not receive full value for his money, and we are glad that the school men of Dauphin think so highly of our efforts in their behalf. It gives us pleasure to add, also, that they are beginning to appreciate properly the hard work done by their Superintendent.

THE following notice appears in the proceedings of the Allegheny Teachers' Institute. We hope that Prof. Sensenig may be able to attend all the teachers' meetings in his section of the State, and receive a gold-headed cane at every one of them:

> After the association adjourned a most pleasant affair took place, in which Prof. Sensenig, of the Indiana Normal School, got completely caned. A number of his former students conceived the idea and carried it into effect by presenting him with a beautiful gold-headed cane, Mr. Morrow making the presentation speech, which was very neatly responded to by the Professor himself. Messrs. Phillips, Gross, Dickson and others made remarks, all of which were very complimentary to Professor Sensenig.

THE well-known house of Hachette & Co., Paris, is about to publish a work entitled "A Dictionary of Pedagogy and Primary Instruction." It will embrace five parts, as follows: 1. General or Theoretical Pedagogy; 2. Special or Practical Pedagogy; 3. The History of Pedagogy; 4. School Legislation and Statistics; 5. Pedagogical Bibliography. The plan of the work, as will be seen by this arrangement, is very different from that of Kiddle and Schem's

Cyclopædia of Education. Like that it will consist of a single volume, and be many times less expensive than Schmidt's great German work.

The preparation of the work is in the hands of M. Buisson, assisted by a large number of gentlemen specially familiar with the several subjects or departments assigned them. As to M. Buisson himself, there is probably no one in France better qualified for such a task.

THE University of Pennsylvania, of which we insert a sketch in another column, has heretofore been so much of a Philadelphia institution that it has not attracted that attention throughout the State and the country which its importance deserves. In buildings, equipment, endowment, breadth of ground covered, and teaching force, it is one of the strongest institutions of the kind in the country. That it has not in the past filled the public eye like Yale or Harvard or even like Princeton and Columbia, is very much the fault of its trustees and faculty, who have in too great a degree *localized* it. They now propose, we are glad to say, to adopt a more liberal policy; and we promise the aid of *The Journal* in making known to the friends of education, at least in our own State, the merits of this old and strong University. Its growth within the last few years has been very rapid, and we see nothing in the way of its taking rank with the best institutions of its class in the country.

WE note among reports of institutes already held that our old friend, Prof. S. R. Thompson, Superintendent of Public Instruction of Nebraska, was on the platform as instructor and lecturer for Supt. Curtis, of McKean. Of course, good work was done. Miss M. L. Sanford, of Swarthmore College, has been up to Susquehanna County also a second time. Mr. Tilden, the County Superintendent, speaks of her work in terms of very high commendation. The Lancaster county teachers also hope to see her again in November, her instruction before the Institute last season having been very satisfactory, such indeed as we could wish all teachers in the State might have even more frequently than once a year?

"HONOR to whom honor is due." Now and then the teacher is the party in favor, as was the case a few weeks since at Egypt, in Lehigh county, when the old pupils of Prof. T. G. Bernd, assembled to do honor to their friend and guide of other days. Music, speeches, flowers, and a feast of other good things, were features of the occasion. The principal address was made by Prof. J. H. Dubbs, of Franklin and Marshall College, Prof. N. C. Schaeffer, Principal of Kutztown Normal School, making the opening prayer. Addresses were also made by others, prominent as clergymen, teachers and lawyers, all of whom had been former pupils of the aged professor. Among the gifts were a large Bible, gold spectacles, an easy chair, etc. Prof. Bernd is the oldest teacher in Lehigh county, having been engaged in the work during the past forty-one years. An occasion of this kind cannot but afford rare gratification to one who has labored faithfully in the Master's vineyard. All day he has tended the vines, and the evening shadows, as they lengthen, find him still at his loving toil.

THE next meeting of the National Teachers' Association is quite likely, after all, to be held at Philadelphia. The Ohio *Educational Monthly*, for September, edited by Hon. W. D. Hinkle, the Secretary of the Association, who would not write without good reasons on such a subject, says:

> The next meeting of the Association will most probably be held either in Philadelphia or St. Louis. In a vote in the Board of Directors, a majority of those present favored St. Louis. As the Association was organized in Philadelphia in 1857, and has never met a second time in any place, it is hoped that when it is twenty-one years old it will return to Philadelphia. Another reason for this is the cordial and numerous invitations received from different bodies in Philadelphia, and the fact that no invitations were received from St. Louis direct. The Association met in 1871 in St. Louis and was received grandly, and therefore, it does not seem to be judicious to return so soon to the city without a very pressing invitation from the city direct. The energetic State Superintendent, the Hon. R. D. Shannon, who tendered the invitation, no doubt felt sure the Association would be welcome. We feel, however, that it would be pecuniarily best for the Association to meet next time in Philadelphia. The Hon. J. P. Wickersham has expressed himself as confident that 1,000 members would be enrolled next year if the Association should meet in Philadelphia. In view of the crippled condition of the Association as to its publication fund, we hope the executive committee will decide to go to Philadelphia. Already some of those who voted for St. Louis have, for sufficient reasons, changed their preferences to Philadelphia.

JOS. T. VALENTINE, Esq., of Reading, presents to the readers of this number of *The Journal*, a strong paper in answer to an article which recently appeared in the *Christian Advocate and Journal* from the pen of its editor, Rev. C. H. Fowler, D. D.

We were, ourselves somewhat surprised to see an article of the kind in the editorial columns of an organ of the Methodist Episcopal Church: a church that has been foremost in upholding our common school system; and we are pleased to be able to lay this reply of Mr. Valentine, who is himself a member of the Methodist Church, be fore our readers.

We endorse the whole argument of Mr. Valentine, with some exceptions as to what he says in regard to the right of the State to tax church property and denominational trust funds. The *right* of the State in this kind of taxation may be clear; but we are quite disposed to think the *policy* of doing it is bad.

AS OTHERS SEE US.

THE editor of the *School Bulletin*, Syracuse, New York, was present at the meeting of our State Teachers' Association at Erie. In the September number of his magazine he speaks in plain words of what he saw. As it may do us all good to take a look at ourselves through the eyes of other people, we print below his article in full:

The Pennsylvania State Teachers' Association held its twenty-fourth annual meeting at Erie, August 7-9. We attended it for the special purpose of comparing it with our own Plattsburgh meeting. What had we to learn from our fellow-workers in Pennsylvania?

In the first place the Erie meeting was, like our own, a failure in respect to numbers and interest: and for the same reason; because it was held in a corner of the State. We are sorry for them, but glad that another proof is offered of the principle in dynamics upon which we hereby stake our life, our fortune and our sacred honor: viz., that teachers will not go to a place they cannot get to.

In the second place, there are, as in our own association, a half-dozen men who do the talking. The Pennsylvania Sanford, always ready to speak, to move, to second, to amend, and to quote from past experience, is President Hayes, of Washington and Jefferson College. We remember him as being an active fish at the Detroit meeting of the National Association, but here he flops around with the easy grace of a whale among minnows. The funny man is F. A. Allen, once more principal of the Mansfield State Normal School. Faces instinctively broaden when he rises. Withal, his remarks are pithy and practical, as well as broadly put. Supt. Shaub has considerable to say, too. He looks very much like H. F. Lawrence, of Ogdensburgh, but has a firm-set mouth and is openly pugnacious. Supt. Jones, of Erie, is as erratic in his use of metaphors, and especially in his reliance upon the hiatus, as Dr. Hoose himself. Supt. Luckey, of Pittsburgh, betrayed no overwhelming enthusiasm in debate, but was in his element at a private meeting of leading educators on Wednesday evening, where the fundamental principles of childhood development were discussed with great freedom.

Supt. Wickersham is of course the final authority. He is formal in manner, precise in language, and looks more like Dr. Pratt than any other of our New York officials. In some remarks he made at the close of one of the discussions, we thought we caught one clue to his popularity. The question had been upon the relation of high schools to colleges. It had been stated that Pennsylvania was in the rear; that in proportion to population she had not one-third as many students preparing for college as Michigan; that she had no first-class college; that boys really fitted for college always went out of the State, to Yale or Harvard; and that it was difficult to maintain in preparatory schools a standard of scholarship high enough to enter those colleges, because the local colleges stood ready to take students with a year or two less of preparation. All this was repeated by the president of the association from his address of the previous day, the facts having been carefully culled from statistics, and bearing the impress of disagreeable but inevitable truth.

Dr. Wickersham seized the opportunity to proclaim that as many students came into Pennsylvania colleges from other States as went out of Pennsylvania to attend colleges in other States; that as many students went to college in proportion to its population as in Michigan; and that as to relative fame, not Yale or Harvard or any other college could show among its graduates a greater proportion of distinguished men than the colleges of Pennsylvania. "Why at Philadelphia I stood hundreds of times before the roll of honor of Washington and Jefferson College," said he, bowing low to President Hayes, "and saw thousands of Pennsylvanians gazing upon it in mute astonishment." Etc. etc. In point of argument, of course all this had little weight beside the careful numerical estimates of President Maris. But it takes with a crowd——of Pennsylvanians. Who was it that said we like even insincere flattery, because it at least shows that the flatterer is anxious for our good-will?

Of course Dr. Wickersham himself is not to be judged by these remarks, which merely proved that he knew his audience. In his valuable reports upon the Centennial Exhibition, he has shown ability to discern and courage to proclaim several features in which our school systems and the results of our school systems are far below those of benighted Europe. Dr. Wickersham has been longest in office of all the present State Superintendents, and Pennsylvania is to be envied in no feature of her school system so much as in a permanent, efficient, respected chief.

The New York visitor is surprised at the prominence of women among the speakers at this association. In our State we seldom get beyond an elocutionist or two and an honorary vice-president, but here the lady teachers really debate. Miss Patridge, of Philadelphia, a pleasant-voiced speaker and an earnest advocate of physical culture, seemed in place, as she is a semi-professional public speaker. But it was odd to see Miss Lloyd, a Bucks county teacher, take part in a debate on college examinations, and when, as vice-president of the association, she was called to the chair, and in the midst of an animated debate and dispute she made her decisions promptly and held to them inflexibly, our gaze wandered down

the vista of future years and saw the clerk of the U. S. Senate consulting Miss Cushing's Manual as to a difficult point of order. Miss Lloyd deserves considerable attention, for she is the auther of that admirable Literature for Little Folks, which we reviewed some time ago (Vol. III., p. 161). She speaks *ore rotundissimo* and repeats the longest motions without a slip.

There is more professional dress among Pennsylvania teachers than with us. Black broad-cloth, stove-pipe hats and round shoulders were almost the rule with the older teachers. We hardly know a New York principal who can with any regard to the use of the word in literature be called a *schoolmaster;* but we could pick out a half dozen such at Erie: men who had held for years a consciously distinct position in the community, like the clergyman and the village doctor. Supt. Baer says we did not see a representative association, the German and Quaker element being wholly wanting. But we saw types we have never met in New York.

We observed that no larger proportion of those present registered their names, than at Plattsburgh. One hundred and thirty was all the list showed at the end of the second day. Yet they had an excellent plan for securing members. An active committee, among them one bright young lady, circulated blanks among the audience, taking care that every comer had one.

Heretofore, the association has paid fifty dollars a year to an officer called the Ticket Agent, who attended to excursions, reduced rates on railroads, etc. This year the office was abolished, on the plea that it was no longer necessary, inasmuch as railroads would no longer make any special arrangements; that most of them had regular excursion rates, and that they would make no deviation from them to members of any association.

To us, who are so accustomed to get free returns through the indefatigable efforts of Dr. Cruikshank and Supt. Danforth, this seemed a curious position for Pennsylvania railroads to take. We wondered whether the difference was in the management of the railroads or in the management of the Association.

In one respect the Pennsylvania Association is more like the Convocation than like our own association. The order of exercises, the time allotted to each debate, and the general management of each session is in the hands, not of the president, but of the chairman of the executive committee. The president is thus enabled to give his whole time to the presiding, without worrying as to how long this shall last and what shall come next. We rather like this plan, especially where the chairman of the committee is so competent and energetic as Supt. Buehrle.

But the chief advantage which the Pennsylvania Association has over ours, is in having fewer subjects and more debate. Not more than two papers were upon the programme for any session; and if a debate was cut off by adjournment, it became the first feature of the programme for the next session. Of course there is this objection to such a plan, that the absence of an appointed speaker leaves a long gap. But it is time protest was made against the very common practice in this State of getting one's name upon a programme, being advertised for two or three months, and then regretting upon a postal card that one can't come. An appointment to speak at an association should be as sacred as a promissory note; and the man should be banned who lets his programmes go to protest.

AN EDUCATIONAL CONVENTION.

THE SCHOOL MEN OF MERCER, BUTLER AND VENANGO IN COUNCIL.

A LITTLE more than a year ago a movement was set on foot by a few school men of Harrisville, Butler county, and vicinity, at the head of whom was A. B. Gildersleeve, esq., the public-spirited secretary of the school board of Mercer district, to hold a popular educational convention for the purpose of forwarding the interests of our public schools and of education generally. The convention was held on the 18th of August, at Martin's Grove, near the point where the three counties above named join. The meeting was attended by from four to six thousand people. It was presided over by Rev. B. M. Kerr, formerly county superintendent of Allegheny county, but now in the ministry at Mercer, and addressed by the President, H. A. Strong, A. M., and others. There were also exercises in speaking and singing by the children who were present in large numbers and accommodated with front seats. Dinner was served on the ground, and both in a literary and social way the convention was considered a success; so much so indeed that it was thought well to adopt a regular constitution, elect permanent officers and provide for an annual meeting of the same kind.

The second meeting was held at the same place on Thursday, the 23d of August last. The attendance was even larger than at the first meeting, many coming from Mercer, Greenville, Franklin, Butler, New Castle and other places at a distance. There was a dinner; and music, pastimes and flags were features as before. Rev. Mr. Kerr was in his seat as permanent President, and delivered a very interesting inaugural address. He was followed by Rev. W. F. Cowden, of New Castle, and Rev. N. H. Holmes, of Mercer. Both addresses were able and full of broad common school doctrine. The rain in the afternoon greatly interfered with the proceedings. Mr. Gildersleeve offered the following resolution, which has laid over to be discussed at the next annual meeting:

Resolved, That we, the people representing these three counties, in convention met, hereby recommend the establishing of a State school book concern which shall furnish to the schools throughout the State uniform books for a given period of time at cost.

The following letter from Gov. Hartranft was read by the Secretary:

HARRISBURG, July 12, 1877.

Dear Sir:—I have the pleasure to acknowledge receipt of yours of the 11th inst., pressing my acceptance of a previous invitation to be present at the Educational Convention on the 23d of August, 1877. As I cannot promise to attend any meetings during this season, you will carry my regrets to the members of the Convention, and my wishes for a full, free and broad discussion of the subject proposed.

The question of the uniformity and supply of school books is a very important one, and on account of the immense interests involved, it is very difficult to handle. It is easy to point out grievances and defects in the present system, but not so easy to devise a plan which may not gradually foster greater inequalities and corruption. And after a system was devised it would be very difficult to have it adoptrd, and still more difficult to find proper men at low salaries to give the necessary time to the positions of trust and responsibility required therein. A "State Book Concern" could no doubt furnish books cheaper, but as it would put the purchasing of books into the hands of one firm, the effort to change would be met by the united opposition of all now engaged in the business. The system would require a thorough organization and a number of officers to distribute the books and collect the funds from the dtfferent districts, and unless the State compiled its own textbooks, the question of copyright would also be an embarrassing one. The manner of selecting the officers—whether by appointment or election, and by what authority, or body, or bodies—must also be settled. The subject is altogether a very intricate one, and as there is no doubt of the necessity of reform, and of legislative action to secure uniformity and cheapness, I trust your discussions will throw much light upon the subject and outline some simple and practical system.

Yours, very truly,
J. F. HARTRANFT.

The Superintendent of Public Instruction received a very pressing invitation to be present, but was unable to do so on account of engagements growing out of the public business.

NATIONAL TEACHERS' ASSOCIATION.

THE National Teachers' Association held its seventeenth annual meeting in Liederkrans Hall, Louisville, Kentucky, August 14th, 15th and 16th. Some three hundred members were present, and twenty-five States were represented. The largest representation was from the West and South. The weather was delightful, and the local arrangements all that could be desired.

It has been the custom of the Association for some years to hold general sessions, which are attended by all the members, in the forenoons and evenings; and, in the afternoons, to divide itself into departments and hold separate meetings for the consideration of subjects of special interest to those who labor in particular fields of educational work. These departments are the following: Department of Elementary Instruction, Department of Higher Instruction, Department of Normal Schools, Department of Superintendence, and Department of Industrial Education. Much of the best work of the Association is done in these several departments, but in the following brief sketch of what was done we shall confine ourselves to the proceedings of the general Association.

The Association was called to order by the President, Hon. M. A. Newell, of Maryland. Mr. Newell introduced Mayor Jacobs, of Louisville, who delivered an address of welcome. Among other things he said:

It is narrated of one of the governors of Kentucky, that when a gathering of teachers similar to this was about to be convened in Frankfort, and he was requested to deliver the address of welcome, he promptly and pointedly declined, saying that "he had need to be taught, and not attempt to teach." Those were sensible and natural words, and yet, for the very reason that I, and so many millions of others "*need* to be taught," am I here to hail with delight the advent to our city of a band who "attend unto wisdom and bow their ears to understanding," for never before, in her hundred years of existence, has our country had more need of wisdom and moderation. The life of the teacher is one ceaseless roll of trials and tribulations, with nothing but the affections and advancement of his conscientious pupils to reward him. Underpaid and his labors misunderstood, he is frequently subject to the whims and caprices of men of mental capacity inferior to his own, but who being "in authority," harass him with their petty tyranny.

The President's address treated of education and labor, and was an able paper. In a future number we shall try to publish the address entire. The following will show its drift:

In his introductory remarks he announced that "Education and Labor" was the subject of his address; and, as it was possible his views might not meet the approval of the Association, he would place the article before them for discussion.

The question before us at this crisis is "Are our public schools doing all that we have a right to demand of them to prepare the young people, who have to live by the labor of their hands, to become intelligent, moral, and industrious citizens?" I have purposely narrowed the inquiry to those who labor with their hands, both because they form so large a majority of the number to be educated, and because those who are not destined to manual labor have always been able, when they desired it, to procure education outside of a public school system. There is a latent fallacy in the arguments of many, with regard to the connection between education and labor, which it may be worth while to expose at the outset.

It is popularly believed, though no one makes the assertion in so many words, that education and labor are, to a certain extent, incompatible, or rather

that they bear to each other an inverse ratio. When one should be highest, the other should be lowest. For those who do the hardest kind of work, the lowest amount of education suffices; indeed, an eminent pulpit orator of a neighboring State, holds that no education is the best for such laborers. On the other hand, persons whose intellect and taste have been cultivated to the highest possible point are popularly supposed to be incapacitated for any useful employment. Accordingly, when primary schools were first established on a large scale, it was commonly believed that diligent and successful pupils would be able to live without working; and in the old spelling-book, thumbed in my boyish days, may be read an exhortation to diligent study, closing with the remarkable assertion, which the boys regarded as a historic fact:

"For learning was the only thing
That made poor Pepin's son a king."

In opposition to this popular undercurrent of thought it becomes us to set forth the doctrine that public education is but the handmaid of labor; that education, so far from superseding labor, seeks only to render it more effective; that so far from there being any incompatibility between them, the best workman is the man who has had the best education.

Mr. Wickersham, of Pennsylvania, moved that a Committee on Nomination of Officers be appointed. The motion was adopted.

Mr. Phelps, of Wisconsin, offered the following:

Resolved, That a committee of five on the National Bureau of Education be appointed by the chair with instructions to report what measures, if any, are necessary for the extension of the powers and the more efficient discharge of the duties of that important agency, such committee to report during the present session of the association.

The resolution was adopted, and the following committee appointed: Messrs. Phelps, of Wisconsin; Wickersham, of Pennsylvania; Hancock, of Ohio; and White, of Illinois.

Mr. J. Ormond Wilson, of Washington, offered the following:

Whereas, Measures for illustrating the condition of education and the most useful and approved appliances for its promotion have been established in other countries, and experience has shown them to be of great utility; and

Whereas, The United States Bureau of Education has secured from the Centennial Exhibition and has now in its possession a large collection of valuable material gathered from our own and foreign countries, but is provided with neither a place in which the articles can be properly arranged and exhibited, nor funds to pay for the services required for this purpose; therefore be it

Resolved, That a select committee, to consist of five members of this association, be appointed by the President to consider the expediency of establishing at Washington, and in connection with and in charge of the Bureau of Education, a National Educational Museum, and that said committee be instructed to report to the present meeting.

The resolution was referred to the Committee on Museum.

EVENING SESSION.

Prof. J. F. Blackington, of Boston, read a paper on "Silent Forces in Education." The diction of this paper was remarkably fine, but in thought it contained nothing new or striking.

Prof. Thomas Price, of the University of Virginia, followed Mr. Blackington, with a lecture on "The Study of English as an Introduction to the Study of Latin and Greek." His point was to show that schools preparatory to college should devote more attention to teaching English and less to teaching Latin and Greek than they now do, and the examinations for entrance into college should be correspondingly changed. It was a strong argument.

SECOND DAY.

Prof. W. R. Webb, of Culleoka, Tennessee, read a paper on the "Relation of the Preparatory or Grammar School to the College and University." He took ground against having preparatory schools in connection with colleges. His arguments were not new. A lively discussion followed, but no conclusion was reached.

Mr. Wickersham reported the nominations for officers. John Hancock, of Ohio, was elected President; H. A. M. Henderson, of Kentucky, first Vice President; W. D. Henkle, of Ohio, Secretary; and J. O. Wilson, of Washington, D. C., Treasurer.

The paper of the evening was by Prof. Maurice Kirby, of Henderson, Ky., on the "Study of Social Economy in Public Schools." The greater part of the paper was taken up in giving the theories of the author on questions in *political* economy; some practical suggestions, however, were finally made on the subject in hand.

THIRD DAY.

Prof. L. S. Thompson read a paper on "Drawing in Public Schools." He said:

It may be said that we have three classes of educators in our country. For our present purpose, these classes may be designated as follows: The utilitarian class, the disciplinarian class, and the æsthetic class. The utilitarian class judges the worth of a study by its practical utility in every-day life. Of a new candidate for favor this class asks such questions as these: Of what use is it? Will it enable its possessor to earn money? Can one, by use of it, win his daily bread any easier than without it? Will it give its possessor power or influence in the world? The second class of educators considers the disciplinary uses of a study of more consequence frequently than the knowledge gained. Previous to the admission of a new study, the æsthetic class inquires, What effect will it have upon the taste? Will it increase one's love of nature? Will it strengthen a love for the beautiful in poetry, eloquence, or the fine arts? Will it have a tendency

to polish the mind, gratify the fancy, or calm the boisterous passions? In short, will it warm into activity the higher soul-capacities, and thereby assist in elevating man to the highest degree of culture known or imagined in this life?" If the subject of drawing be rationally presented to any of these classes, we shall have no fears of an unfavorable answer. The utilitarian will readily acknowledge that there is "no person, whatever his profession, but at times has need of drawing to render his ideas intelligible to others."

The following resolutions were passed concerning the National Bureau of Education:

Resolved, That the National Educational Association hereby reaffirms its profound conviction of the great value of the National Bureau of Education, as an agency for collecting, collating and diffusing that information which is a vital necessity to the welfare and progress of schools and school systems under a government of the people.

Resolved, That we urge upon Congress the imperative necessity of making adequate and liberal pecuniary provision for the support of the bureau, and for the preparation, publication and distribution of its invaluable reports, circulars of information, and such other documents as are constantly and unceasingly demanded by the great army of educational workers throughout our extended country.

Resolved, That we believe a permanent building of suitable proportions and arrangements for the accommodation of an adequate clerical force, for the preservation of the rapidly-increasing professional library, and for the reception and classification of the generous donations already made and to be made by foreign countries, as well as by our own people, to the pedagogical museum, is a prime necessity, and that speedy provision for the same ought to be made by our national authorities.

Resolved, That the association also hereby reaffirms its cordial approval of the measures which have been pending before Congress for several years, or some proper modification of the same, involving the general principles of said measures, providing for the permanent investment of the proceeds of the sales of the public lands annually accruing, as a national fund, the income from which shall be apportioned among the several States, under the supervision of the Bureau of Education, upon a proper basis of distribution, for the benefit of common schools, normal education, and the more complete endowment and support of the industrial and technical colleges already established, or which may be hereafter established, in the several States, under the act of Congress approved July, 1862.

Resolved, That a committee of five, consisting of the President and President elect of this association, President Bowman, of Kentucky, Mr. Wickersham, of Pennsylvania, and Prof. Hogg, of Texas, be appointed to wait upon the President of the United States at the earliest practicable date, to lay before him the views of the association upon the subject matter of this report, and request his favorable consideration of the same in his forthcoming message.

Resolved, That a committee of fifteen members of the association be appointed by the President thereof, to act in conjunction with the committees of similar bodies, and in co-operation with the department of superintendence at its winter meeting, with instructions to prepare a memorial to Congress embodying the views herein expressed, and urging such legislation as shall be substantially in harmony therewith.

Mr. J. Ormond Wilson, of the Committee on National Museum, read the following supplemental report:

The educational value of comprehensive and classified collections of articles illustrating the resources and products of different countries and of the various industries of man, has been impressed upon the world by means of the brilliant series of "World's Fairs," or, as they may be more definitely termed, "Exhibitions of the Industries of all Nations," which, beginning with that of Hyde Park, London, in 1851, culminated at Philadelphia in 1876. It is no longer necessary to support the utility of such collections by argument. The term "Museum," which once meant in popular estimation little more than musty collection of useless curiosities, has been infused with new life, and now means the most active educational influence known to modern civilization. Object teaching is found to have new significance and to be of world-wide application. Educationists early saw that this power was as applicable to the rapid dissemination of a knowledge of the methods and appliances of the science of education as it was to that of the arts and manufactures, and the educational collection begun in England by the Society of Arts, and first exhibited in 1854, has become, partly by Government aid and largely by individual contributions, a most important branch of the South Kensington Museum, embracing as it does a collection of over 20,000 volumes of educational books, and many thousands of models and appliances for educational purposes—the list of these alone, brought down to the end of 1875, filling a volume of over 870 closely-printed pages. Russia, Austria and Italy have followed the example of England in establishing general educational museums; while most of the other European countries possess, each, several museums adapted to various branches of technical and industrial instruction.

On this continent our neighbors of the Dominion of Canada have set the example of organizing such a collection, the value and utility of which were made evident to all by means of the remarkable educational exhibit displayed at Philadelphia by the Province of Ontario.

While no governmental educational museum has ever yet been organized by the United States, the advisability of making such a collection has been realized, and its creation urged.

The Exhibition at Philadelphia afforded an unprecedented opportunity for obtaining a quantity of material from the various countries of the world, at the cost of little trouble and comparatively trifling expense. Unfortunately Congress made no appropriation in aid of this, and in consequence the opportunity could not be availed of in any adequate measure, and the educationists of the country were compelled to see a magnificent opportunity pass away comparatively unimproved. However, it was impossible but that much should remain. In the preparations made by the United States Commissioner of Education to procure statistical material bearing on the educational history of the past century, and in the material designed to represent the various systems and appliances of education in all its phases as presented in the United States, there was gathered in the Government building the nucleus of a most interesting collection, most of which became the property of

the Government, and needs but the natural growth and development which would follow its installation in a suitable place, to become most valuable to all educators, while its value will be greatly enhanced by its conjunction with the rare and unique educational library already possessed by the United States Bureau of Education, and which is being rapidly increased by means of the systematic exchange of educational publications conducted by the Commissioner with foreign officials.

Although unable to obtain anything by purchase, many gifts were made to the Commissioner by foreign individuals and governments, so that, in fact, a very large educational collection, comprising many thousands of separate articles, is now stored in Washington awaiting the action of Congress. This comprises, first, the most of the collections exhibited at Philadelphia by the United States Commissioner, viz.: the statistical charts, maps and diagrams, prepared at the Bureau of Education expressly for the exhibition, and which give a most clear and comprehensive view of the statistics of education, both public and private, in the United States. Second, the models, publications, furniture, apparatus and school appliances, etc., exhibited. Third, the views of colleges, universities and schools, which formed such an attractive feature of the exhibition. Fourth, the very valuable collection illustrating the progress of education among the Indians. In addition to these articles, the very complete and interesting educational exhibit, made at the suggestion of the United States Commissioner of Education, by the Government of Japan, has been presented to the Commissioner as a donation to the contemplated National Educational Museum. This collection is full of interest, first, as showing most clearly the habits, methods and material of education in Japan before the contact with European civilization; and secondly, the progress made up to 1876 in adopting the methods and appliances of European education. A complete set of mechanical and chemical apparatus manufactured by their own "School of Arts and Manufactures" fills one large case, while samples of school furniture now used, and of all other school appliances, bring into sharp contrast the old and the new.

A very fine collection of school material from the Ontario exhibit, valued at about $1,100, and presented to the Educational Museum at Washington, fills a large room. Many valuable gifts from Austria, Germany and Switzerland, add to the interest of the collection, and show how readily, by a system of international exchange such as is carried on by the Smithsonian Institution, this Educational Museum at Washington could be developed into an institution where Americans could see for themselves all the new and improved educational appliances of other nations without being compelled, as now, to cross the sea. In a properly-organized museum, wherein every department of material relating to education, whether concerning the proper building, lighting, heating, and ventilating of school rooms, and their furnishing, or the best text-books and apparatus, should be constantly on exhibition, arranged under intelligent supervision, it is easy to see that the educators of the country would possess the means of avoiding many mistakes and of readily keeping themselves informed of the best results of the efforts of educators throughout the world, to extend, develop and improve the all-important science of education.

In view of the great necessity that is felt for some such central repository, where all the facts relating to the various needs of public education can be readily ascertained, and in view of the fact that so satisfactory a commencement has been already made toward founding a National Educational Museum, as is shown by the collections of articles and of the educational library now in charge of the United States Commissioner of Education at Washington, it is the opinion of this committee that it is the duty of Congress to make suitable provision for the collection, preservation and care of a National Educational Museum, which shall meet the needs of the educators and of the public.

Dr. Rufus C. Burleson read a paper on "The Educational Interests of Texas." This paper was short, pointed and full of interest. It was followed by a discussion on the "Educational Wants of the South." It was opened by J. P. Wickersham, of Pennsylvania, and the following is a synopsis of his remarks as they appear in the Louisville *Courier-Journal:*

Mr. Wickersham said it was well known that he lived north of Mason and Dixon's line, and he had enjoyed no special opportunities of informing himself in regard to the condition of education in the Southern part of Union. The President of the association was sometimes facetious, and he might have appointed him to open the discussion for the fun of the thing. But he might have been in earnest, and desired to fill the place with a Northern man known to sympathize with the educational work now going on in the South. If so, he was free to say that no one felt more interest in that work or would do more to aid it than himself. The people of the South—the whole people of the South—must be educated in order to keep their great country free and make it prosperous and happy. His opportunities had been too few to enable him to speak of the educational wants of the South from his own observation, but what he had to say would be based mainly upon the reports of school officers in the South, educational journals published there, and conferences and correspondence with Southern men. One thing is clear, that everywhere, in all the States, there are indications of improvement. A better public sentiment in regard to systems of popular education is being formed, and men high in social and political influence are becoming more and more outspoken in favor of the education of the people. The facts just presented by the gentleman from Texas look unmistakably in this direction, and so do those mentioned from time to time on this floor by gentlemen from other Southern States. The progress may be slow, but it will be sure, and our Southern friends must work away and wait in patience.

But what are the educational wants of the South as stated by Southern men?

They want better school-houses. So do we want better school-houses at the North. Yours may not be so numerous or so good as ours; but we have been thirty, fifty, a hundred years in building them. You have just begun in earnest, and a school system is not built up in a month or a year. I know you have many good school-houses; next year you will have many more, and the next—until you rival the best of ours. They want better teachers. This want is also felt in all States and countries. It can be supplied only by the establishment of teachers' seminaries or normal schools. You have begun this work. Let it go on.

Let training schools and normal schools be founded one by one, and your teachers will be gradually lifted up to a higher level, and new life will be infused into the whole work of education.

Southern educators complain that the work of supervision is incomplete. Your laws in this respect are quite as good as those of the North. It is true that a State system of public instruction requires a general officer at its head, with subordinates in each county and subdivision of a county. We must have in the end in every State of this country three grades of school inspectors, or superintendents—in the township, in the county, and in the State. To provide these officers will be good economy. Teaching is becoming too much of a science to be directed by any but experts. Everywhere, in all countries, the efficiency of systems of schools may be measured by the frequency and thoroughness with which they are inspected. But we must have patience for some years with our Legislatures on this question.

Complaint comes from the South, too, on the question of non-attendance at school. And with reason; for if I read your statistics aright not more than half, perhaps not more than one-third of the children of school age in the South attend the public schools in any one year. This fact has an ugly look; but a change for the better is taking place, and as your country fills up and becomes more prosperous, this change will be more rapid. But look to the children out of school, I beg you; for universal suffrage will prove a curse unless accompanied by universal education.

You say your financial affairs have been disordered, and you are in need of money to carry on the work of education. Time will cure this evil. It is now in process of cure. The hand of industry will, in the coming years, bless your fruitful country with plenty, and your children need not long lack on that account for an education, high or low. Meantime, I would that Congress should grant you aid. We have just voted that the proceeds of the public lands should be set apart for educational purposes. For one, I am willing that for some years the South shall have all the money coming in this way—aye, I would be willing were it ten times as much. Whatever makes you strong strengthens us. But let me caution you against relying mainly upon funds coming through the hands of the State or the General Government to carry on the work of education. A fortune is many times the ruin of a man. We are apt to value slightly that which comes easy. We set most store upon what we work and pay for. The levying and collecting of local taxes turns the attention of the people to the schools, and induces them to interest themselves in their management. It awakens discussion and promotes progress. The best touchstone of a right public sentiment respecting education is a willingness on the part of the people to put their hands in their own pockets and take out the money necessary to make liberal provision, not only for your own children, but for all the children in the community. Possibly there are towns, counties or States in the South that at this time cannot bear the application of such a test; but let the drift of the work be in this direction, and in the end there can be no mistake in the result.

You need, as we do, patience, for the time when education shall be universal seems long in coming; but, brothers, be of good courage, for the victory cannot be uncertain. The Republic must either educate or die.

EVENING SESSION.

Hon. George W. Hill, of Arkansas, read a paper on "Educated Mind."

The following resolution, offered at a previous meeting, was adopted as the fourth by-law of the Association: -

That no paper, lecture or address shall be read before the association, or any of its departments, in the absence of its author; nor shall any such paper, lecture or address be published in the volume of proceedings without consent of association in each case.

The association now took up the discussion of Industrial Education, and a general concurrence was expressed in the view that the addition of Industrial Education to our existing system was not only entirely practicable without interfering with existing studies, but was really the great want of the age—the one thing needful to complete our educational system.

Several examples of the complete success of industrial education in colleges were narrated by the Professors present, from which it appeared that young men could acquire, under competent instruction, the skill of a good journeyman mechanic in less than a month, and that after obtaining an industrial education the graduates commanded the highest wages in their mechanical pursuits.

At 10 o'clock the President announced that many of the members could not remain longer, and a motion to adjourn was adopted—passing over to the next annual meeting the further discussion of the deeply interesting subject.

The place of holding the next meeting was not definitely fixed. At the meeting of the Board of Directors, Philadelphia and St. Louis were the rival candidates, and a preference was shown for St. Louis.

Directors' Column.

THE *Journal* goes into the hands of every School Board in the State. In addition, some hundreds of boards subscribe for it. We are therefore anxious to make it useful to them. School matters from the standpoint of a School Director look somewhat different than from the standpoint of a teacher. Are there not directors who will be willing, during the coming year, to write out their views and send them to us for publication? Thousands of directors devote much time and not a little money to promote the interests of the schools: will

they not do still more to forward these interests by telling others, through *The Journal*, what kind of schools we ought to have, and how they can be maintained? We will gladly accept communications from directors giving hints, detailing facts, making suggestions, pointing out difficulties, or containing any other matter that will be calculated to better the condition of our schools. Nor would we have any director feel backward because his views may not accord with our own. We are not infallible. We have found ourself many times in the wrong. We like free discussion, well knowing that through it we arrive at the truth. We would like *The Journal* to be the organ of all the friends of public schools, whether they agree with us as to the best way of improving them or not.

LOCAL school boards elected by the people to manage their schools are almost unknown in other countries. It is this part of our school machinery that foreigners find it so difficult to understand. Among an ignorant, illiberal people such an arrangement would necessarily fail. Its success can only be partial unless the people are intelligent, virtuous and public-spirited. The measure of success it has enjoyed here shows how much more capable our people are for self-government than are many of the nations of the Old World.

THE question of night schools will soon present itself for consideration to boards of directors in our cities and in districts where children are required to work in the daytime. We recommend their establishment wherever there are children who cannot attend the day schools in sufficient numbers to make a school. Such an addition to the school system of a district will cost money and create some trouble; but it is our imperative duty to educate, as far as practicable, all the children in our several communities.

SCHOOL DIRECTORS cannot attend to official business unless in session. Papers are sometimes signed by the officers of school boards, or by individual members of the same, that have never been formally passed upon by the board. All such papers are illegal, and not binding upon the board. If they bind anybody it is only the individual members who sign them.

THE law makes it the duty of boards of directors to visit the schools under their control by one or more of their number at least once a month. This duty is not always performed. Is it not possible to do it better the coming term? Let all boards take the matter up in earnest and adopt a plan of visitation. They can appoint a person outside of the board and delegate to him the power of visiting the schools, instructing the teachers and reporting to the board. They can appoint a member of this board district superintendent and require him to do all the visiting. They can divide themselves into committees of one or more and pay monthly visits to the schools. Or they can divide the schools among them and each member visit his allotment of them. But to be effective the visitation must be regular, and the inspection close and careful. Properly done, it is the life of a system of schools.

TEACHERS are plenty, and many can be found who will accept very low salaries. Let directors remember that low-priced teachers, like many other things that are low-priced, are apt to be the dearest. It is vastly better to employ a good teacher at a fair salary than it is to employ a poor teacher at one-half the amount. Indeed, many teachers are dear at any price. The best policy for a board of directors to adopt in regard to teachers is, to employ none but those who are well qualified, and then agree to pay them fairly for their work. We regret exceedingly to see boards of directors cut down teachers' salaries, drive out of their districts the best teachers, and then supply their schools with teachers who will work cheap. Such a policy tends to rob the children of what to them is more valuable than money.

ON the second Tuesday of May next, County, City and Borough Superintendents are to be elected. This is really a more important election than that of members of the Legislature or even that of Governor. The superintendency is always successful when the right man is in the office, and it is never successful unless he is. We can name superintendents in Pennsylvania whose worth to the counties and cities where they labor cannot be estimated in dollars and cents. They are literally doing more than all other agencies combined to lift up the people to a higher level of intelligence and morality. And, unfortunately, we can name others whose services could be dispensed with without incurring loss of any kind. They are dead weights, drawing their salaries and doing nothing. We write to ask

school directors to begin to look around for the man they want to serve them as superintendent for the next three years If you now have him, *keep* him; if you have him not, light your lantern and go in search of him. Don't hesitate about the salary. You can hardly pay a good man too much, and a poor man you do not want at all.

SELECTING SUPERINTENDENTS.

MESSRS EDITORS: Before we enter upon another school year, the Directors of this Commonwealth will be called upon to perform one of the gravest duties pertaining to their office—that of selecting County Superintendents. The present system is defective, and we had hoped that the Department would ere this have presented to the Legislature a bill which, enacted into law, would have changed the method of electing these officers. While we feel and know that the superintendency has achieved grand results, when the office has been administered in accordance with the spirit of the law under which it was created, yet we are free to say that some of these officers are growing careless and need the wholesome check of legal restraint. In a county like ours, there are many school districts remote from the county seat. They are new, and should have the fostering care of those whose duty it is to work our common schools up to a higher plane of excellence. But under the present system of electing these officers, the directors of such districts, because of distance and expense, seldom attend the convention. And I am sorry to say that some of our schools seem to be entirely ignored, simply because certain officers are under no obligations for their election to these districts. At the last Convention out of more than two hundred Directors in our county, ninety-six only were present. These were from districts adjacent to the county seat, that were anxious to secure a man who would teach a Normal School in their best town, to the utter neglect of his official duties.

We want a law that will guarantee to every district a full voice in the election of County Superintendent. This can only be brought about by allowing all boards to meet at their respective places, cast their votes for the man of their choice, and send the Secretary as a delegate to the Convention; then let the State Superintendent, who has charge of the appropriation, determine the salary. Or let this Convention of delegates fix the salary according to the instructions of the districts they represent. We want a law, too, that will abolish what is now known as county normal schools. As we have them conducted at present, they are a detriment to the cause of the teacher. Annually our Superintendent opens a school of this kind, from which there pass out yearly scores of young boys and girls, who carry a license to teach, and who do not possess the first requisite of a successful teacher. They are equipped with a certificate two months before the examinations are held, and are therefore successful in getting good positions, while our old and deserving teachers are crowded out. We believe in the training of teachers for their profession; but let good schools, under competent teachers, be established in different parts of the county, not for the express benefit of the county superintendent and a certain town, but where each section of the county may alike be benefited. Let the reading of *The School Journal* and some good work on the Theory of Teaching be made a requirement in the granting of certificates, and we will have less "shoddy" in the profession of teachers than we now have.

As a director who feels a deep interest in the welfare of our common schools, I would suggest that we have our laws so modified that at our next triennial convention every director can be privileged to exercise his official functions so as to secure for us perfect freedom from all phases of evil which have been the outgrowth of a somewhat defective system of electing County Superintendents.

AN OLD DIRECTOR.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, OCTOBER, 1877.

THE State Appropriation to the several school districts of the Commonwealth is due and payable as soon after the close of the school year as these districts have placed the required report and certificate on file in the Department of Public Instruction.

The delay in making payment for the present year is owing to the want of funds in the State Treasury applicable to the purposes. The Department could issue the warrants, but as there is insufficient money in the Treasury to pay them, it is thought trouble and misunderstanding are avoided by issuing them only as fast as they can be paid. The funds now at command are about sufficient to pay one-half of the districts and those will receive their money in the order in which their reports and certificates were placed on file. All the rest will be paid as soon as the money comes into the treasury with which to do it. It may be proper to add that the Department regrets exceedingly the delay in the payment of the appropriation; but as it neither collects nor handles the State's money, it is in nowise responsible for it.

PROFESSIONAL INSTRUCTION AT THE NORMAL SCHOOLS.

THE following is a copy of a letter recently addressed to the Principals of the several Normal Schools, defining the law concerning professional instruction:

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, *August 22, 1877.*

PROF. ——— ———,

Principal of State Normal School at ———.

Dear Sir: I have been asked to define the following paragraph in the law relating to the allowance made by the State to students in attendance at the State Normal Schools: "That each student in a Normal School, drawing an allowance from the State,

must receive regular instruction in the science and art of teaching in a special class devoted to that object, for the whole time such an allowance is drawn."

My construction of the law is as follows:

1. The class in teaching must be a special class, with a well-defined course of instruction exclusively of a professional character. A class instructed in a branch of learning with some reference to the methods of teaching it, is not what the law means by "a special class in teaching."

2. The instruction to a class may be by lectures or from a text-book, but it must be well-defined and systematic. In most cases a text-book is preferable.

3. A class in teaching must not be larger than the regular classes in the mathematics or the sciences. It is not a fulfillment of the law to put fifty, seventy-five, a hundred or more students into a class and deliver, at stated times, a course of lectures to them. Grammar, botany, algebra cannot be well imparted in this way; neither can the science and art of teaching.

4. The law undoubtedly contemplates that the classes in teaching shall recite with the same frequency as the classes in other subjects. Recitations once or twice a week in teaching, when recitations in other branches of study take place daily, is not what the law requires.

I trust that immediate steps will be taken in all the Normal Schools to carry into full effect the provision of the law above referred to as now expounded.

All future applications for the State allowance to students at the Normal Schools must be accompanied by a statement showing the number and size of the classes in teaching, the frequency of the recitations, the names of the professors, and the subjects in which instruction has been given.

Yours respectfully,
J. P. WICKERSHAM,
Supt. Pub. Instruction.

NORMAL SCHOOL, EIGHTH DISTRICT.

THE following are the official papers concerning the recognition by the State of the Normal School of the Eigth District, located at Lock Haven. We had hoped to publish therewith the proceedings of the Commission appointed to visit and inspect the school, as well as a brief history of the enterprise, but the promised documents have not come to hand. We shall publish them next month, probably with some remarks of our own:

APPLICATION.

HON. J. P. WICKERSHAM, Supt. Public Instruction:

Sir: We the subscribers, trustees of a school association and corporation, in City of Lock Haven, county of Clinton and State of Pennsylvania, respectfully represent that we as trustees as aforesaid, in association with a number of citizens of this State exceeding thirteen in number, have erected and established a school for the purpose of carrying out the object of said association and the professional training of young men and women as teachers for the common schools of the State, at the City of Lock Haven aforesaid, in the Eighth Normal School District, and desire to have the same inspected by a Committee appointed under the Act of Assembly, approved May 20th, A. D., 1857, with the design of having the Institution recognized as a State Normal School for said district, under the corporate name of the association, which is, The Central Normal School Association of the State of Pennsylvania.

[Signed:]

L. A. MACKEY, *President*, S. D. BALL, *Secretary*, J. W. Smith, H. H. Best, W. W. Rankin, A. N. Raub, J. H. Barton, Sam'l Christ, Jacob Brown.

REPORT.

LOCK HAVEN, Clinton Co, Sept. 14, 1877.

WHEREAS, The Central Normal School Association having made formal application to the Department of Public Instruction for the appointment of a committee to examine its claims to be recognized as the State Normal School of the Eighth District, according to the provisions of an "Act to provide for the due training of teachers for the Common Schools of the State," approved the 20th day of May, 1857;

AND WHEREAS, The undersigned being duly appointed and authorized under said Act, and having personally, and at the same time on the 14th day of September, 1877, visited and carefully inspected said school, and made a careful examination thereof, of its by-laws, rules and regulations, and its general arrangements and facilities for instruction, and having found them to be substantially such as the law requires; therefore

Resolved, That the Central Normal School Association is, in our opinion entitled to recognition as a State Normal School, with all the privileges and immunities enjoyed by other institutions of like character in the Commonwealth.

Signed: WM. BIGLER, President; C. R. Earley, C. B. Gould, James A. Beaver, J. P. Wickersham, Superintendent Public Instruction, *Committee.*

We concur in the above,

Signed: Geo. R. Dixon, Supt. Elk county; M. W. Herr, Supt. Clinton county; J. W. Allen, Supt. Potter county; J. A. Gregory, Supt. Clearfield county; Henry Meyer, Supt. Centre county; N. H. Schenck, Supt. Cameron county; John A. Robb, Supt. Lock Haven.

PROCLAMATION.

COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, *Sept. 15th, 1877.*

WHEREAS, In pursuance of the application to this Department of the Trustees and Contributors to The Central Normal School Association of the State of Pennsylvania, in association with sundry citizens of this State, exceeding thirteen, for the appointment of a committee to examine the claims of a school established by them, to recognition as the State Normal School of the eighth district, according to the provisions of "An Act to provide for the due training of teachers for the Common Schools of the State," approved the 20th day of May, 1857, the following gentlemen were appointed, viz.: Hon. Wm. Bigler, Hon. C. R. Earley, General James A. Beaver and C. B. Gould, Esq., to act as said committee in conjunction with the State Superintendent of Public Instruction; George R. Dixon, Superintendent of Elk; M. W. Herr, Superintendent of Clinton; J. W. Allen, Superintendent of Potter; J. A. Gregory, Superintendent of Clearfield; Henry Meyer, Superintendent of Centre; H. N. Schenck, Superintendent of Cameron; John A. Robb, Superintendent of the City of Lock Haven; and

WHEREAS, All of the committee so appointed, after having carefully inspected said school, and made a careful examination thereof, of its by-laws, rules and regulations, and its general arrangements

and facilities for study, reported unanimously that said school is entitled to recognition as a State Normal School, with all the privileges and immunities enjoyed by other institutions of like character in this Commonwealth;

Now therefore: I, State Superintendent of Public Instruction, do hereby give notice as required by law, that I have recognized the school established as aforesaid, as the State Normal School of the eighth district, composed of the counties of Elk, Clinton, Potter, Clearfield, Centre and Cameron.

In testimony whereof I have hereunto set my hand and affixed the seal of the Department of Public Instruction, at Harrisburg, the fifteenth day of September, 1877.

J. P. Wickersham,
Supt. Public Instruction.

PERMANENT CERTIFICATES GRANTED.

No.	NAME.	RESIDENCE.
1953	A. M. Koons	Bethlehem, Northampton.
1954	J. S. Griffiths	Homer City, Indiana.
1955	Joseph Martin	Easton, Northampton.
1956	Emma H. Hoaglands	" "
1957	Jerusha Alsover	" "
1958	J. T. Bell	Plumbville, Indiana.
1959	John D. Cook	Danville, Montour.
1960	D. F. Balph	New Castle, Lawrence.
1961	S. T. Wiley	Confluence, Somerset.
1962	Ella Crawford	Allegheny City.
1963	Sadie Walker	" "
1964	Ira Shipman	Sunbury, Northumberland.
1965	Albert H. Smith	Masontown, Fayette.
1966	J. C. Geyer	Wilkesbarre, Luzerne.
1967	J. M. Kyle	Altoona, Blair.
1968	H. W. Henry	Pine, Clinton.
1969	I. N. Lucas	Wiley, Greene.
1970	Jas. M. Ferrell	Wood Ridge, Greene.
1971	John Williams	Mt. Morris, "
1972	D. M. B. Wann	Douglassville, Berks.
1973	Newton Jones	" "
1974	Eli A. Thomas	Waynesburg, Greene.
1975	Flora M. Pfouts	Columbia, Lancaster.
1976	Mazie Welsh	" "
1977	M. M. Horton	Wells Tannery, Fulton.
1978	Wesley Miles	Williamsport, Pa.
1979	J. F. Reamer	" "
1980	Lizzie H. Hobson	" "
1981	A. T. Parker	Jersey Shore, Lycoming.
1982	M. T. Yarnall	Lehighton, Carbon.
1983	Harriet S. Decker	Allegheny City.
1984	Robert Malone	Tarentum, Allegheny.
1985	Geo. W. Weaver	Curwensville, Clearfield.
1986	Clara Barrett	Luthersburg, "
1987	Aggie Kerr	Clarington, Forest.
1988	H. Z. Kuebler	Tremont, Schuylkill.
1989	Mary Dunn	Ten Mile, Washington.
1990	A. E. Stewart	Indiana, Indiana.
1991	E. J. Aber	Turtle Creek, Allegheny.
1992	Bell McCall	Allegheny City.
1993	Julia S. Hill	Tidioute, Warren.
1994	Hessie Munn	Allegheny City.
1995	Mary E. Mansfield	Easton, Northampton.
1996	Tillie Mason	" "
1997	Susan R. Miller	" "
1998	Emma C. Miller	" "
1999	Ellen M. Serch	" "
2000	Wm. H. Rudolph	S. Bethlehem, North'ton.
2001	Aaron F. Heilman	Heilmandale, Lebanon.
2002	Geo. W. Imboden	Lebanon, "
2003	Aaron Imboden	Annville, "
2004	Adam R. Forney	" "
2005	R. A. McKinney	Elizabeth, Allegheny.
2006	Lizzie A. Weir	Plymouth, Luzerne.
2007	Jennie Moffat	Pittsburgh.
2008	Lizzie Fisher	"
2009	Mary C. White	Allegheny City.
2010	Annie E. Conrad	Pittsburgh.
2011	Mary J. Polley	"
2012	Nannie Y. Boice	"
2013	Anna F. Mays	"
2014	Ella Cunningham	"
2015	Maria G. Louden	Allegheny City.
2016	Nannie E. Shannon	Pittsburgh.
2017	H. I. Gourley	"
2018	Annie Bamford	"
2019	Charles B. Wood	"
2020	Maggie McElroy	"
2021	Miss V. M. Matteson	"
2022	Alice H. Peet	Mountain Lake, Bradford.
2023	E. K. Richardson	Great Bend, Susquehanna.
2024	Alice G. Clark	Susquehanna Depot, Pa.
2025	Wm. F. Derr	McEwensville, North'um.
2026	J. S. David	Smithfield, Fayette.
2027	Mollie C. Harbison	Haysville, Allegheny.
2028	Maggie A. Hunter	Pittsburgh.
2029	Mrs. A. M. Petty	Pittsburgh.

TEACHERS' COUNTY INSTITUTES.

The annual sessions of the Teachers' Institute in the several counties of the State, will be held at times and places as announced below.

Warren	Columbus	Oct.	8
Bedford	Bedford	"	8
Clarion	Clarion	"	15
Cameron	Emporium	"	15
Venango	Franklin	"	15
Potter	Coudersport	"	16
Snyder	Middleburg	"	22
Berks	Reading	"	22
Bucks	Doylestown	"	22
Sullivan	Laporte	"	29
Chester	West Chester	"	29
Lehigh	Allentown	"	29
Montgomery	Norristown	"	29
Mercer	Mercer	Nov.	5
Lawrence	New Castle	"	5
Lancaster	Lancaster	"	12
Delaware	Media	"	12
Juniata	Mifflintown	"	12
Franklin	Chambersburg	"	19
Carbon	Mauch Chunk	"	26
Dauphin	Dauphin, Nov. 27	Halifax, Dec.	18
Adams	Gettysburg	Dec.	3
Lebanon	Lebanon	"	4
Luzerne	Wilkesbarre	"	17
Schuylkill	———	"	17
Columbia	Bloomsburg	"	24
Jefferson	Brookville	"	24
Mifflin	Lewistown	"	24
Armstrong	Kittanning	"	24
Blair	Hollidaysburg	"	24
Cambria	Johnstown	"	24
Centre	Bellefonte	"	25
Greene	Waynesburg	"	26
Somerset		"	31
Westmoreland	Greensburg	"	31

Book Notices

NORMAL UNION ARITHMETIC.—*Designed for Common Schools, Normal Schools, High Schools, Academies, etc. By Edward Brooks, A. M., Ph. D. Pp.: 424. Philadelphia: Sower, Potts & Co.*

NEW NORMAL WRITTEN ARITHMETIC.—*Designed for Common Schools, Normal Schools, High Schools, Academies, etc. By Edward Brooks. Pp.: 421. Philadelphia: Sower, Potts & Co.*

Yielding to the demand for a text-book that should combine both the mental and written features, the author presents the Union Arithmetic, with "mental exercises" and methods of analysis and "written exercises" and methods of solution alternating, wherever practicable, throughout the work, the "mental exercises" being so arranged and printed that teachers preferring to do so, can omit them without inconvenience. Both this book and the New Normal Written are characterized by a careful gradation of problems, these including a large proportion of the most practical kind under the different rules. The subject of Building and Loan Associations is treated more fully in these text-books than in any others we have seen. Indeed the prominent feature of the books is their *practical* character, a goodly proportion of the problems being directly from the store, the shop, the bank, loan association, insurance office, and the custom house.

CÆSAR'S COMMENTARIES ON THE GALLIC WAR, *With Notes, Vocabulary and Maps, By G. R. Bartholomew. Von Antwerp, Bragg & Co., 28 Bond St., New York.*

This edition of Cæsar is based upon an approved text, and is provided with notes to the first four books. There are, also, several very needful illustrations which will materially smooth the way of the student in deciphering the meaning of certain passages of the import of which it is dfficult to form a satisfactory conception without such aids. The volume is very well printed on good paper, and substantially bound.

THE COMPLETE ARITHMETIC.—*Combining Oral and Written Exercises in a Natural and Logical System of Instruction. By Albert N. Raub, A. M., Pp.: 333. Philadelphia: Porter & Coates. Introduction Price, 50 cents.*

Prof. Raub is of opinion that, in the schools, "too much time is given to arithmetic." We think he is right. In a series comprising two books, he presents the public with his views, in the concrete form, as to what an ordinary arithmetical course should comprise. Oral and written arithmetic are combined so far as seems practicable, and the selection of problems is very satisfactory. All comers to this field are welcome; and a text-book must be valuable that represents methods of teaching so successful as those of its author. It is a book to be examined, tested, and approved.

AMERICAN HISTORY FOR SCHOOLS.—*By G. P. Quackenbos. New York: D. Appleton & Co.*

This is a somewhat concise sketch of the principal events in American history, and would seem, we should say, from glancing over it, to be an improvement upon the Common School Histories of the United States, some of which are the most dismal reading we ever attempted. We observe some originality here and there, in the treatment of a topic or of a character, as, for example, that of Penn. "Penn wanted it [his colony,] called simply Sylvania, and actually offered one of the secretaries twenty guineas to have the name changed." But in spite of his humility and his good-will to all mankind, he met with very base treatment, even from many of those whom he had benefited, and "his latter days were clouded." "After a life devoted to the service of others the pure and gentle Friend died in 1718, having received little reward in this world except the approval of his own conscience," a fact very valuable in counteracting the teachings of those who would persuade us that virtue always meets with the rewards of worldly success and material prosperity. The book is got up in neat and durable style.

WILLIS'S HISTORICAL READER.—*Based on the Great Events of History. By William Francis Collier, LL. D. A. S. Barnes & Co., New York.*

The volume, without entering into the minutiæ of history, gives a clear, and generally adequate account of those great events of which no person who desires to pursue a course of general reading even, can neglect without being constantly reminded of the want of information necessary in carrying out his design. In some parts of the volume we find the superficial and stereotyped views of past conditions of society repeated very much in the customary manner; but a philosophical digest of history, impartial and independent, is not to be looked for yet, and would not, we fear, meet with popular patronage. A teacher of intelligence and discrimination may use the volume advantageously, as a text for historical conversations with his school.

The American Naturalist for September, published by H. O. Houghton & Co., Boston, contains an illustrated article by B. D. Halsted, on the method of reproduction in the freshwater algæ, which must be very interesting to all those students of botany who have a desire to go beyond the mere rudiments of the science as it is taught in most of our schools, where the Latin names of two or three dozen conspicuous flowering plants constitute the sum of acquirements of the vast majority of those who enter upon the study. The illustrations of this article are such as will enable the student to make personal observations in verification with entire success. Dr. Leconte contributes to this number a paper "On Critical Periods in the History of the Earth, and their Relation to Evolution," which is very suggestive.

Popular Science Monthly, Supplement No. 5. D. Appleton & Co., New York.

This number of the supplement fully sustains the promise of the prospectus. The very just principle adopted by the editor appears to be to present to readers the ablest articles on both sides of any mooted question, and accordingly we find in this number the very severe, though gentlemanly, reply of Alfred Russell Wallace to the attack on the spiritualists, by Dr. Wm. B. Carpenter. "The Bible," by Professor W. Robertson Smith, and "The Trial of Jesus Christ," by Alexander Taylor Innes, are discussions of great originality, and the articles entitled "Copernicus in Italy," and "Secret Societies in Russia," must be interesting to every intelligent reader. He who has once had a taste of the quality of this publication, will be loath to forego the pleasures of the monthly refreshment derived from its pages.

THE ALPINE HORN.

MALIBRAN. CARL MATZ arr

f

1. In the wild chamois track, At the breaking of morn, With the hunter's pride, O'er the mountain side,
2. I have cross'd the proud Alps, I have sail'd down the Rhone, And there is no spot Like the simple cot,

We are led by the sound of the Al - pine horn, Tra la la la la la la la la.
And the hill and the val - ley I call my own, Tra la la la la la la la la.

mp

O that voice to me is a voice of glee, Where-ev - er my footsteps roam; And I
There the skies are bright, and our hearts are light, Our bosoms without a fear; For our

f Chorus.

long to bound, When I hear that sound, Again to my mountain home. In the wild chamois track, at the
toil is play, And our sport, the fray With the mountain roe or deer.

Chorus.

breaking of morn, With a hunter's pride, O'er the mountain side, We are led by the sound of the

pp Echo.

Al - pine horn; Tra la la la la la la la la, Tra la la la la la la la la la.

THE
SCHOOL JOURNAL
ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

Vol. 26. NOVEMBER, 1877. No. 5.

INDUSTRIAL EDUCATION AT THE NATIONAL ASSOCIATION.

ADDRESSES OF HON. M. A. NEWELL, AND OTHERS.

THE leading feature of the proceedings of the National Teachers' Association at its late meeting at Louisville, was the attention given to Industrial Education. This question is now of paramount interest. It is the great question of the times. We therefore need make no apology for the space we occupy in its consideration. We present first the able address of the President of the Association, Hon. M. A. Newell, of Maryland, and, second, the proceedings during two days of the Industrial Department. Our report is copied from the Louisville *Courier-Journal.*

MR. NEWELL'S ADDRESS.

That free institutions, resting on the basis of universal suffrage, cannot be perpetuated unless universal suffrage is accompanied and stimulated by universal intelligence, is a truism which I should not be justified in repeating before this audience, were it not that the events of the last few weeks have converted the dormant truism into a pregnant truth. "Had the public schools done their whole duty," said an intelligent fellow-citizen in my hearing one morning after a night of riot, "had the public schools done their whole duty, such an outbreak could not have occurred; even the most ignorant should have known that grievances, real or imaginary, in a free country, can not be redressed by lawlessness and outrage, and that even if temporary relief could be obtained by such means, the remedy would be worse than the disease." "And," replied another intelligent citizen, "had it not been for the public schools the results of the strike would have been still more disastrous. The battle of the pigmies would have been the battle of the giants. It was the good sense of an immense majority of the working people, created, fostered and developed by public education, that saved us from the horrors of the French commune."

The second speaker was doubtless right. Had educated intelligence been less widely diffused than it is, had all or a great part of the labor of the country taken up arms against capital, there would have been a revolution to which history offers no parallel. But was not the first speaker right, too, to a certain extent? Would such an outbreak have been possible if the workingmen in it had been accustomed and trained to think as well as to toil? And if the public school of to-day has any special function, as distinguished from systems or modes of education which have preceded it, is it not to add thought, intelligence, to labor? Have we entirely succeeded in effecting this union? Let the last weeks of July answer. Can we recognize in the wild outburst of the mob that howled around the lurid fires whose smoke eclipsed for a moment the sun of American civilization, any higher intelligence than in the South Sea Islander, who beats his fetish because it will not answer his prayers.

The first gust is over. It was but a summer flaw. The ship was unprepared and lost a spar or two. The damage will soon be repaired, and the "goodly vessel" will be even stronger than before. But we are still within the storm belt, the forces that produced the conflict of the elements are still in operation; we may expect another longer and fiercer tempest—a cyclone, it may be. How are we prepared to meet it?

> "O navis, referunt in mare te novi
> Fluctus."

Let it not be said of us, as of the Assyrians by the prophet, "Thy tacklings are loosed, they could not well strengthen their mast; they could not spread the sail; then is the prey of great spoil divided; the lame take the prey." The commission given to the Roman Dictator, "See to it that the Commonwealth receives no injury," is now the order of the day to every American citizen, in his own place and sphere

of action. To us as educators, comes with especial force the order, "See to it, that, so far as your office is concerned, the Republic receives no injury."

But is our office at all concerned with such things? These rioters, were they not foreigners, for whom our schools are in no way responsible? Fellow-teachers,

> "For love of grace,
> Lay not this flattering unction to your soul.
> It will but skin and film the ulcerous place,
> While rank corruption, mining all within,
> Infects unseen."

Foreigners there were in plenty, no doubt, among those misguided people; but many, nay most of them, were sons of the soil, for whose habits and modes of thought, so far as those habits and modes can be affected by education, we are directly responsible.

The question before us at this crisis is, Are our public schools doing all that we have a right to demand of them to prepare the young people who have to live by the labor of their hands, to become intelligent, moral and industrious citizens?

I have purposely narrowed the inquiry to those who labor with their hands, both because they form so large a majority of the number to be educated, and because those who are not destined to manual labor have always been able, when they desired it, to procure education outside of the public school system. There is a latent fallacy in the arguments of many with regard to the connection between education and labor, which it may be worth while to expose at the outset.

It is popularly believed, though no one makes the assertion in so many words, that education and labor are, to a certain extent, incompatible, or rather that they bear to each other an inverse ratio. When one should be highest the other should be lowest. For those who do the hardest kind of work, the lowest amount of education suffices; indeed, an eminent pulpit orator of a neighboring State holds that no education is the best for such laborers. On the other hand, persons whose intellect and taste have been cultivated to the highest possible point are popularly supposed to be incapacitated for any useful employment. Accordingly, when primary schools were first established on a large scale, it was commonly believed that diligent and successful pupils would be able to live without working; and in the old spelling-book, thumbed in my boyish days, may be read an ex hortation to diligent study, closing with the remarkable assertion, which the boys regarded as a historic fact:

> "For learning was the only thing
> That made poor Pepin's son a King."

In opposition to this popular undercurrent of thought it becomes us to set forth the doctrine that public education is but the hand-maid of labor; that education, so far from superseding labor, seeks only to render it more effective; that so far from there being any incompatibility between them, the best workman is the man who has had the best education.

In answer, then, to the question propounded, I would say:

First—The school system, as it operates at present, does not go down low enough. It does not stoop to take in the very classes that need it most. In its aspirations after high respectability it is apt to look coldly on the wounded Samaritan, and pass him by on the other side. Well-clad boys and girls, who can give six hours a day to the public school and an hour or two after school hours to the preparation of lessons, are welcomed with open arms, and furnished with such opportunities of improvement as money could not have purchased half a century ago. But what kind of reception is accorded to the fatherless urchin, whose mother keeps him at home two days out of the five and three hours out of the six to assist in the necessary work of the family? What provision is made for those who must either attend irregularly or not at all? For those who have to work half the day blacking boots or selling newspapers, but could be induced to go to school the other half? For those whose parents have no wish to send them to school, and for those who refuse to go when their parents send them? Finally, what do we do for those whose parents live by secret crime, and who are therefore growing up in outlawry—the Ishmaelites of our street deserts, whose hand is against every man and every man's hand against them? There is growing up in all our cities, towns, villages, and even in some country districts, a class of young people who must live either by honest labor or by crime, and they are not taught to labor; what does the public school do for them?

It will be said, perhaps, we need a compulsory law to supplement the common-school system. Would that I could believe that a disease so wide-spread and deep-seated could be removed by the application of a patent porous plaster? When an act of Parliament can make a silver dollar equal in value to a gold one, irrespective of the laws of supply and demand; when the multiplication of legal tenders makes genuine money plenty: when legislatures can compel railways to run at a loss or to run without loss at whatever rates they may prescribe; when legislation can provide good work at good wages for every laborer, regardless of the law of capital and production; when men can be made temperate by a prohibitory liquor law, or pious by a compulsory church law; when, in fine, water can be made to run up hill by act of Congress, then, and not till then, will I believe that the Arabs of the street and the neglected sons of poverty and crime can be reclaimed by a law requiring their attendance at school.

Not only does the public school not penetrate deep enough to reach the lowest strata of society, but its lessons are not sufficiently broad and practical to meet the wants of the majority of those whom it *does* reach. Could we only be certain that all who enter the primary school would finish the course and graduate at the High School, there would be little, if any, reasonable ground of complaint with regard to the curriculum. But so far from this being the case, we know that not one in a hundred completes the course. A great school system is a gigantic staircase. Step A leads to B, and B to C, and so on to Z; and at Z there is a broad landing, and a magnificent prospect, but "few there be that find it." One hundred young climbers start at A; fifty have dropped out of the line before they are half way up, and of the remainder but one reaches the summit. What is to become of the stragglers? Why, we are told it is not our business to look after stragglers. The column must advance, the line of march must be unbroken, the path has been marked out and the army must pursue it, whether the objective point is reached by one or many.

True, if we have only the right goal in view, and if our grand objective be the safety of the entire army, and not the pushing forward of the heads of columns. In this aspect the care of the stragglers becomes an object of supreme concern.

It may be asked, and will doubtless be asked by those who shall follow me in the discussion of this question, Is any serious modification of the ordinary common school curriculum possible? Within the brief limits of this paper it is of course impossible to discuss details, still it may reasonably be expected that I should indicate the direction in which, in my opinion, the change should proceed.

Taking the most favorable view of the average programme now in use it may be conceded that each step forms the very best preparation for the next higher step, and that the course, as a whole, is well fitted to prepare the pupil who completes it for the ordinary duties of life. But the true theory of a common school programme is that every step shall be the best possible preparation for stepping out, rather than for stepping up. It is conceivable that the two may coincide, and I have been told that in St. Louis they are believed to coincide, the fitness for promotion in class being conceived to be the best attainable preparation for the work of life at the given age. But looking at the ordinary and average common school programme in the United States it will be found that the interests of the few who complete it are studied more than of the many who do not complete it. Such a change as I contemplate would involve a thorough re-arrangement of text books, the postponement of many topics to a later period in the course, and the introduction at a comparatively early period of subjects either omitted or taught in the later stages of the curriculum. It would bring in writing and drawing at the very beginning, and continue them to the end, *pari passu* with reading and spelling. It would give only the simple practical and useful parts of arithmetic in the early stages, and put off the theoretical and disciplinary chapters till much later. No general discussion of fractions, for example, should be attempted before the sixth year of the course. All the science of grammar should be postponed till the pupil was able to speak and write his natural language with tolerable ease and correctness. And all through the course there should run alongside of the elementary lessons in the various departments of natural history, systematic instruction in morals and political economy. While the discipline and development of the mind should never be overlooked, yet this discipline and development should be looked for as the proper outgrowth of a rational and practical course of study. It may be proper to regard mental development as a proper end *per se* when we deal with those who are to have a liberal and complete education, but for the masses who are destined to have merely a fragment of the course, the best discipline will necessarily be found in connection with the acquisition of the knowledge which shall be found most useful in their after school life.

I must anticipate one or two objections: "The present course is already too long. It is impossible to add anything to it without overweighting both teachers and pupils." I reply that what we propose is not simply extension, but readjustment. If new studies are introduced, it must be by curtailing the time devoted to the old. I have very little doubt that by judicious management one-half of the time given to spelling, arithmetic, grammar and geography could be saved to the great advantage of the pupils. Pardon me if I illustrate what I mean by reference to spelling.

A very large part of a child's school life is spent in learning to spell. It has been calculated that on an average an hour a day, for the ten years between six and sixteen, is spent upon this accomplishment. Now granting that good spelling is a necessary part of a finished education, does it follow that so much time should be given to it in the earlier part of the course? Are there not other things which the pupil is capable of learning, and a knowledge of which would be of more service to him than the ability to spell all the test words in the list? Of what use can spelling be to one who can not use the words which he has learned to spell? And if the vocabulary of a pupil who leaves school at fourteen is limited, as it is, to between five hundred and a thousand words, of what use is it to him that he can spell five or ten thousand words? Indeed, I might go farther and say, of what use is it to any one to be able to spell correctly, except so far as the possession of one of the external signs of scholarship may be considered useful? What practical advantage has the orthography of Noah Webster over that of Josh Billings? Why must there be an absolute uniformity in spelling, which we do not require and can not attain in pronunciation or in handwriting? Will a man be likely to build a house, or a carriage, or a ship, or a steam-engine any the worse because he spells *precede* and *proceed*, *relieve* and *receive*, *deleble* and *indelible* according to the same analogies? If the first elements of spelling have been properly taught, a student's spelling will keep pace with his reading; and why should it advance faster? If a person can spell correctly all the words that he has met with in his reading, he can probably spell all the words that he can use intelligently, and what need has he of more? Time, then, can be saved from spelling; and by rigidly excluding from the primary curriculum every part of arithmetic, grammar, and geography, which is merely preparatory, or disciplinary, and not immediately useful, a large saving of time can be effected, which can be utilized in the revised programme.

How shall the time thus saved be employed? A part of it should be given to reading; not to the mere calling of words, nor to premature lessons in elocution, but to plain reading of good books for the sake of the information they contain. It is not creditable to our efforts as educators that so large a proportion of pupils pass from us without having acquired a taste for good reading, I mean the reading of good books. Consult the statistics of any of our popular libraries, and observe how few books of real merit are called for, and then say if the course of instruction of which this is the outcome does not need a re-adjustment. If our system confers an ability to read without creating, not only a desire to read, but a desire for the right kind of reading, it surely stands in need of reformation. Especially for those who cannot have the benefit of a complete curriculum is it necessary that they be brought into sympathy, at an early age, with good literature, and saved from being shipwrecked on the rocks of dime novels, or the shoals of trashy Sunday-school novelettes.

I have great faith in good books. If the first aim of a public school system is to make men better *workers*, the second is to make them better *thinkers*, and for this purpose the young mind must be brought into correspondence with the thoughts of the great men who lived in former days, and of those who are still living. It is but little to teach children to read, if, when they have learned it, they have no desire to apply their power to a worthy object. Very little

of the arithmetic which children learn at a school can be made available in after-life. The puzzles of the "Mental," which they solve with so much patience, and execute with so much dexterity, are fortunately strangers even to the desk of the commercial clerk. Their feats of analysis and parsing are never to be repeated among the contests of actual life. Nine-tenths of what they have learned as geography will pass away as the morning cloud and the early dew. But a taste for good reading, once acquired, will last for life; will be available every day and almost every hour, and will grow by what it feeds on; will so occupy the time of the young as to rob temptation of half its power by stealing more than half its opportunities; will give a keener zest to every pure enjoyment; will be a refuge and solace in adversity; will spread from man to man and from family to family, and finally will not perish with the individual, but descend from the fathers unto the children to the third and fourth generations. Oh! books, books, you are the only friends who are never weary of entertaining us, and yet look for no return; who are every ready to turn night into day for our service. You are the teachers who instruct without punishing, advise without reproaching, and approve without flattering. You alone can remind us of our faults without wounding our pride, and signalize our virtues without inflaming our vanity.

Part of the time which we propose to gain by abridging or omitting the more technical and merely preparatory part of the course should be given to the two arts of expression, drawing and composition, of which I shall say nothing more here, as they will be fully discussed by other speakers.

Part of the time should also be given to positive and systematic instruction in morals. The possibility of teaching morality in a systematic way, and as part of the regular course, is denied by a majority of those who uphold as well as of those who oppose a purely secular system of education. Many deny even the need of it, holding that the family and the church are competent to take charge of this department. But it must not be forgotten that the public school contains pupils who have no church connexion and no family instruction. The safety of the State requires that *all* her citizens should know the difference between right and wrong. Surely it is of quite as much importance to *do* right as it is to spell right; yet how insignificant is the time given to the one in comparison with what we spend on the other. Besides, every school does in effect teach morality, and the only question is, Shall it be taught indirectly, spasmodically, and according to the whim of the individual, or shall it be taught systematically, continuously, and with the weight of superior authority? Would not mental development be as effectually secured by the discussion of problems of right and wrong in conduct as by correcting bad English, making out lists of long rivers, or extracting square and cube roots?

Besides morals, the elements of political economy would claim a part of the time which we are attempting to redistribute. The usefulness of this branch of knowledge no one questions; and, in the curriculum of our best high schools, political economy is assigned to a place alongside of moral philosophy. But this does not meet the case, because millions of the pupils never reach the high schools. My opinion is that the elements of personal and social morality, the principles of good behavior in the family and in the world, the elements of political economy, the nature and relations of money, capital, labor and wages, can be made as accessible to the young as the elements of grammar and arithmetic, and much more interesting. There are heights in all subjects (grammar as well as political economy) which the young can not climb. There are depths which they can not penetrate, but there are also wide plains where they can freely roam and gather the flowers of useful knowledge. I would have these fields opened up to the younger as well as the older pupils; it is not necessary for them to attempt to scale the mountains till their limbs are stronger.

I am sure we make too much of the supposed difficulty of such subjects. Here is a part of the charge delivered by Judge Ewing at Pittsburgh, at the late trial of the rioters. Let any unprejudiced person judge whether the substance of it could not have been taught to children of ten years of age, and whether, if it had been taught systematically and positively, it might not have been the means of saving many lives and millions of money:

"Men have a right to quit work with or without a reason for their quitting; but they have no right to go on the property of their employers after they have ceased to work, either singly or in crowds. Going upon the company's property in this case, whether they lifted a hand or not, made them trespassers. If three or more of them consulted together and agreed to interfere with the movement of trains, they were conspirators. If they committed any acts of violence, whereby they intimidated or prevented others from going to work, they were guilty of riot. And there can be only two sides to the riot—those engaged in it, with their aiders and abettors, and those opposing it. There can be no innocent spectators to a riot."

You will remember that the question I had proposed to discuss was, "Are our public schools doing all that they ought to do to prepare young people who have to live by labor to become intelligent, moral and industrious citizens?" In answering the question I have endeavored to show, first, that the school does not go down low enough into the strata of humanity to affect the very classes that have most need of it; and, secondly, that school instruction deals too much with technical scholarship and too little with practical utilities—too much in mere preparation for advancement in the hierarchy of studies, and too little in preparation for the verities of life. I remark now, in the third place, that a knowledge of some form of industrial labor is at least as necessary as a knowledge of books, and that the State which acknowledges its obligation to teach children to read can not logically deny its obligation to teach them to work. I approach this part of my subject with great diffidence, for it is beset with practical difficulties; but the times force it upon our notice, and a full and calm discussion may serve to prepare the public mind for changes which either with our aid, or in spite of our opposition, are sure to take place.

All public institutions which are destined to permanence must be able to adapt themselves to the changes that are going on around them. They must be plastic enough to adjust themselves to their environment, else they will be crushed by the pressure.

Circumstances have greatly changed since the planting of the seed which has grown into the mighty tree known as the public school system. I have time to specify two only of these changes—the abolition of apprenticeship and the extensive introduction of machinery, accompanied by its necessary result, a

minute subdivision of labor. Half a century ago school learning was confined to the simplest rudiments; a boy quitted school at fourteen and went on the farm, or was apprenticed to a trade. In the former case his education went on during the winter months, as a matter of course; in the other his indentures obliged his master to give him a fair school education as well as to teach him a trade. Thus, at twenty-one years of age, having learned pretty thoroughly the little that was then taught in the way of book-learning, and having learned, not merely how to support himself by honest labor, but also that the intelligent practice of any industrial pursuit is itself an education, he went out into the world to exercise his rights as an American citizen, not rich in scholarship, but rich in what is better far, good common sense, gathered by patient continuance in well-doing. In those days men built houses that were meant to last, and not to be blown over by the first gale; chairs and tables made then will be as good as new at the close of the century; the very tailor made the sewing on of a button a matter of conscience. I need not say that we have changed all that.

The apprenticeship system, by which young men were kept under tutors and governors until they came of age, has been given up. The trades-unions abolished it. Fathers banded themselves together to take the bread from their children's mouths. Like the Russian princes in the story, they tried to save their own lives by throwing their children to the wolves. Alongside of this change, of which the result has been the loss of trained artisans, there has been going on another, which only aggravates the evil—the cutting up of the departments of industry into minute subdivisions, which afford training for the hand only, and no development to the intellect. Fifty years ago, men laboring at their trades were still *men;* now they are *hands*, with only one head to a hundred of them. It is not Hercules now that accomplishes our labors, cleansing Augean stables and such like, but Briareus, with his hundred hands and but a single head. Machinery does almost everything, and man comes in only to supplement the steam engine.

The public school has now to adjust itself to the altered feelings and wants of society. If in time past children were sent to school that they might become scholars and so escape the drudgery of manual labor, they should now be made to understand that they go to school to learn to be more efficient workmen. The public school is the school of the many, though its doors are hospitably open also to the few. The many must live by labor, and the school must help them so to live. No longer must the primary school be looked on merely as the vestibule to the high school, which, in its turn, is but the ante-chamber of the college; but the public school in all its departments must be regarded as the turnpike road from which the travelers step at once into the farm and the workshop. No doubt some will win their way to college, some will take high stools in the counting-house, and some, alas! will drop down in the nearest ditch as unskilled laborers. These are exceptions, or accidents. "The greatest possible good to the greatest possible number" demands that all the sympathies of the school shall be on the side of intelligent and artistic labor.

Further, and finally, the public school system cannot be regarded as complete, till to its departments of language, mathematics, science, &c., there is added another, to which these are but the stepping-stones—a department of manual labor. Few will deny this in theory; fewer still would be willing to carry it into practice. The State undertakes to educate the children of the people in order that they may become good citizens. But they cannot be *good* citizens unless they have learned to work; therefore, the State should teach them to *do* something as well as to know something. "Granted, but," we are told, "the thing is impracticable. The State cannot teach farming, and carpentering and shoemaking." So, ocean steamship navigation was pronounced impracticable forty years ago; so the sewing-machine was impracticable thirty-odd years ago; so the Atlantic telegraph was impracticable twenty years ago; so ten years ago it was pronounced impracticable in England to give a primary education to all the children of the poor. But all these things are now accomplished facts. The word "impracticable" is in the dictionary still, but its definition has been changed. It now means difficult and costly. That is all.

But, says an objector, it is the business of the parent and not of the State to give a child a trade. Herbert Spencer goes further and says it is the business of the parent to educate the child, and the State has rightly nothing to do with education. Where are you going to draw the line? The State may teach the art of writing, but not of printing; the art of drawing, but not of wood-cutting; the art of composition, but not of book-binding. Put it into plain English and say the State must not teach anything by which a young man can make a living; yet even here you would be inconsistent, unless book-keeping (by which many graduates of our public schools do make a living) were stricken from the curriculum. There is no escaping from the argument that if the State, for her own protection, is bound to interfere to prevent children from growing up in ignorance, she is equally bound to prevent them from growing up in idleness. If parental duties and obligations are insufficient to meet the one case, they are equally insufficient to meet the other.

Here is a lad just from the primary school; he can read and spell and write his name, and make some simple calculations; his parents are poor, he must leave school and go to work; he can't find a place as an apprentice, the unions have prevented that; he looks for odd jobs; he finds one now and then; he must be constantly on the look-out, constantly on the street; he becomes a loafer; he falls into crime; he is arrested, tried, convicted—once, twice, three times; finally he is sent to the penitentiary. And then, when he has cost the State more money than would have kept him at school four years longer; when his conscience is seared, his bad habits confirmed into a second nature, his self-respect gone, his character ruined, what do we propose to do for him? Why, just what we should have done at first—we teach him a trade, so that when he leaves the prison he may have the means of making an honest living.

Do I think it possible to attach workshops to our public schools? Certainly not. But I do think it possible to have public workshops where boys can learn trades as well as public schools where they can learn letters. And just as we transfer the few from the State school to the State college, where they learn to be thinkers, I would transfer the many from the city school to the city workshop, where they would learn to be workers. If this were thought to be too much for a first step, it would certainly be possible to arrange, under the sanction of the State and the general direction of the public school

authorities, a system of apprenticeships by which the privilege of learning some form of industrial occupation should be secured to all who need it, while at the same time the incomplete literary education of the learner should be carried on as far as might be necessary and proper.

It was not my intention to enter into any greater detail than would suffice to make my meaning clear. It is evident to all that the whole question of industrial education, the establishment of technical schools and schools of art is involved in the principles laid down. I leave the subject to the association for discussion.

PROCEEDINGS: FIRST DAY.

The regular order of the programme was proceeded with, the paper of Hon. S. R. Thompson of Nebraska, coming first. The following is an abstract of his address on "The Relations of the Common School to Industrial Education:"

Our common schools may be divided into two classes, quite different in their condition and management. The ungraded schools are mostly found in the country districts, and the graded schools in the towns. In the latter are included the Free Public High Schools. He would confine his remarks principally to the country schools.

The term "Industrial Education," as used, has, two meanings: 1. Education *for* the industries; 2. Education *in* the industries. As things are, it is not practicable to do much in the way of teaching trades or any kind of industrial employments in connection with public ungraded schools, though in cities or in High schools something of this kind may be done. He would speak principally of industrial education in the first sense, that kind of education which prepares for the profitable pursuit of the industries.

The elements of industrial education—using the term in the sense just specified—ought to include thorough, clear, definite and working knowledge of at least the following: 1. Reading of our language as embodied in written words, and the language of form as embodied in drawing. The language of words and the graphic language should be made equally familiar. 2. The power of giving expression to thought in the two forms mentioned before—writing and drawing. 3. The art of computation for business purposes and the keeping of accounts. 4. The leading social, moral and political principles by which the laborer is related to the State, to capital, to other laborers, and the obligations and duties to which these give rise. 5. The sciences which underlie the various industrial processes.

In order to see clearly how our primary education may be better adapted to the wants of the working classes, let us recall some of the ways in which even a limited education—*limited* in quantity, but good in quality—will add to a worker's value. Among many things the following may be specified:

He is more readily instructed in the duties of his work; more self-controlled, and needing less supervision. Being more intelligent, he works to better advantage and produces more in a given time. He is more industrious; less inclined to idleness and dissipation and less liable to become a pauper or a deadbeat. He is less liable to join in strikes or engage in those excesses to which they sometimes lead.

If to the elements of common-school education we add instruction in the elements of the moral, social and political sciences, the valuable results are much increased. A laborer thus prepared is better able to avoid dangers which threaten himself or others; to detect and remove difficulties which cause expense and delay; to discover simpler and shorter methods of work, and thus to add to his power as a producer. A careful estimate, based on extensive inquiries, makes the gain in all these ways amount to from 25 to 1,000 per cent. of the productive ability of a laborer who is entirely uneducated. The relations of the common school to the working classes are very great, since nearly all laborers are educated in these schools. This being the case, it is obvious that, if the common school studies and methods are especially adapted to any class of people, it ought to be to the working-classes.

Our school work is not as well adapted to the wants of working people as it ought to be in the following, among other, particulars:

1. It is too bookish. The book is taught instead of the subject; words are taught instead of ideas; the relations of words are considered instead of the relations of thoughts or of things.

2. Our courses contain too many things. The multitude of subjects studied precludes the formation of habits of continued work at a single thing.

3. The studies pursued are too often dictated by fashion instead of being adopted from a consideration of their fitness. For working people who do not take an extended education book-keeping is a much more useful study than algebra, yet the latter is studied by ten times as many pupils as the former—because it is the fashion.

4. The metaphysical refinements of modern methods in many cases require children to follow, or attempt to follow, the course of their own mental operations in the attainment of intellectual arts, where the pupil is unable to comprehend the philosophy of the process, and in the attempt to do so fails to acquire the art. This becomes sometimes ludicrously obvious in the attempt of children to master the subtleties of some of the "logical solutions" given in some works on mental arithmetic.

5. There is too much cultivation of the *knowing* powers to the exclusion of the *active*. A man's intellectual standing should be measured not by what he *knows*, but by what he can *do*. Knowledge is not power, but only a condition of the attainment of power.

Among the several MEANS OF REFORM may be mentioned:

1. Concentrate the pupil's work on fewer subjects, and thus develop the power of continuous work.

2. Distinguish between knowledge and skill; and remember that skill cannot be obtained but by practice.

3. Test a pupil's advancement in the knowledge of an art by calling upon him to practice the art, rather than to tell how it ought to be done. For years many teachers have been ostensibly teaching grammar as the art of correct writing; but instead of testing the learner's knowledge by asking him to write, he was asked to analyze or parse, as though this was any certain test of his ability to write correctly.

4. Separate the useful and necessary parts of arithmetic from those things which are only curious, or disciplinary (?), and teach the more important first, leaving such things as "casting out the nines," "finding the true remainder," "contractions," "arbitration of exchange," "circulates and repetends," &c., &c., for the high school or the college.

5. Composition must take the place now occupied

by grammar, and the latter be carried forward to its true place in the curriculum of the college or high school.

6. Penmanship should have a regard principally to plainness, and rapid execution. Fancy flourishing may be considered "an extra."

7. The pupil should be made to feel that he has *mastered* some one thing. When a pupil feels that his studies are too many for him, he is in a bad way.

8. He must recognize the fact that culture and discipline are not so much dependent upon *what* is taught; as upon *how* it is taught. The most perfect clearness and definiteness must be regarded as indispensable at all stages.

9. Drawing, as a means of cultivating the perceptions and remembrances of forms and their relations, and of developing the power of exact and comprehensive observation, must be taught from the beginning of the school course. The pupil must learn to be as familiar with the *form* language as with the *word* language.

10. Reading must be taught as a means of obtaining knowledge rather than of communicating it. Especial pains should be taken to cultivate the ability to read easily and understandingly; and, if possible, every pupil should be taught to love reading.

These changes and reforms, if carried out judiciously, would save a large part of the years now devoted to the study of the common branches, and leave time to teach the elements of the natural sciences and other things which every intelligent workingman needs to know. Such a change in our methods of instruction as is indicated would, it is thought, greatly improve them for the use of those who will ultimately engage in industrial pursuits, and not in the least interfere with the best progress of those who aspire to higher scientific or professional education.

DISCUSSION.

At the close of Prof. Thompson's remarks, the subject was opened for general discussion.

Prof. John Hancock, of Ohio: We shall, most of us, probably agree as to the importance of technical instruction; but as to the manner of imparting it we shall some of us differ. I, for one, can not agree that technical instruction can ever be substituted for our schools for general instruction. I do not believe that we should have different schools for different occupations. The boy does not know what work he is going to do, and I am glad that he does not at that age. In other countries the boy does know, because he follows the occupation of his father. I may, perhaps, say of myself that I am an educator that labors, but when I went to school I could not see that I was going to be a teacher. I did what came, and I would have the American boy do whatever lies at hand, and I believe that the proper education is that which gives a man power to do this. If we give the pupil this to the best of our ability we can not go far astray. I can not agree to any crystallization into classes that would be likely to result from so early a determination of the occupation of the pupil. The son of the workman of to-day is the lawyer of to-morrow, and the son of the President of to-day may be the workman of to-morrow, and we can't specially fit either for his occupation, because we don't know what it will be. We should make general instruction the trunk of our educational tree, and let technical instruction grow out of it. For some the technical instruction should grow out nearer the root, and for others farther away. I do not wish to be understood as opposed to technical instruction, but strongly in favor of that broad, generous instruction in the common schools that fits for all occupations.

Prof. Thompson: I claim that if the common schools are adapted to any one it should be to the workingman rather than the professional man.

Prof. Hancock: In answer to that I would say that the education that is the best for any man is best for the workingman.

Mr. Chase: I should like to know if industrial education for girls has been discussed. It can not be denied that something is needed in that line. They go through the High School, and when they come out of it they feel themselves upon a different plane from their parents, and are discontented with their former surroundings, and yet have no means of supporting themselves in any other. Now, should there not be some industrial occupation connected with their education? I must indorse what the President of the Association said this morning about the need of this thing. There *is* room for inquiry if we can not take up this matter and give something that will be more valuable than what we now give them.

President J. D. Runkle, of Massachusetts, instructor of technology: In Brookline, near Boston, we have in all respects an excellent High School, yet this fact we can not ignore: It leaves too many of its graduates without special connection with their future life. I believe that something can be done to remedy this defect—that we can formulate the industrial pursuits so as to teach them in our common schools even much better than grammar is now taught.

Mr. J. P. Wickersham, of Pennsylvania: I belong, perhaps, to another department, but I feel that these questions are among the most important that come before us at this meeting. We are certainly prepared for the higher technical schools. That is not questioned. But the President of the Association had in view this morning the question whether our common schools can not be turned more in this direction. I must agree with Mr. Chase as to the need of this. I have seen large classes come out of our high schools and go back home without a qualification for anything. We see the same fact in the demand for places involving light work like book-keeping. Our people are partly right in saying that the common schools are not doing what they should for the common people. It would *not* be a bad thing if half the time of the girls were taken up in learning sewing, telegraphy, wood-carving, and other arts of like nature. I believe that it is practicable that the work for girls may be divided in this way. With boys the case would be more difficult, but we find in Europe that they do the same with boys. I am not sure but that if half the money expended in the schools of our cities were expended in the erection of shops to teach the boys and girls trades it would be better.

Mr. Chase: I have a case in point—a fact. A woman of culture—a graduate of a high school—is now in the alms-house of this city because she could do no kind of work—not even iron the simplest article of clothing. Thus she became a burden upon her friends. Now, I ask, *wouldn't* it have been better to have used part of the money expended in her education in teaching her to cook and to sew and to iron?

Mr. W. D. Henkle, of Ohio: That lady was foreordained to the alms-house. I want to offset that story. In the reports of Horace Mann, on Education in Massachusetts, it is shown that educated girls perform more work than those not educated. An-

other example is afforded by my own sisters. One went into the kitchen quite early and learned to do housework. The other, younger, went through the high school, but was married first. She learned more housework in the five weeks before she was married than did the other in as many years.

Prof. Hancock: We forget the fact that schools are not the only educational institutions. A girl can learn housekeeping better under her mother's direction than in the school, and the best place for a boy to learn farming is on his father's farm.

Prof. Thompson: It is not the *thing* taught alone, but the *spirit* in which it is taught. Teachers do not hold out to boys the promise that they may become good mechanics and good farmers, but that they may become good lawyers, presidents, etc.

Mr. J. L. Picard, of Illinois: I cannot believe that this looking for something higher is a bad thing. If the character is only right, there is no danger of producing a tramp or a beggar. If there were a little lifting up of the girls at home we should not hear this complaint about them. We want an elevation of feeling at home. I don't believe we are going to introduce the study of trades into our schools. Let us feel that it is character that we want, and that education is the building up of that character that shall made a man ashamed to do a mean thing. Among our idle men I don't find educated men. Employers turn off those first that are least valuable, and these are the ignorant ones.

PROCEEDINGS: SECOND DAY.

President J. D. Runkle then addressed the meeting, on "The Russian System of Mechanic Art Education, as applied in the Massachusetts Institute of Technology." The following is an abstract of the remarks, given with as much fullness as possible from notes taken during their delivery:

Some of you may have noticed the Russian exhibit of technical education at the Centennial last year. For eight years I had been seeking a solution of the question of manual education, and my mind was therefore in a very receptive state for such ideas. At the Massachusetts Institute of Technology we had made the theoretical part of technical education as complete as was possible. We had sent out men well educated in their professions, but in one sense with their hands tied—men designed to be the directors of construction shops, who possessed absolutely nothing of the manual skill required in such construction. We found that the most successful of these engineers were those that went into the shop after leaving the institute and learned the trade. But for these men to place themselves on a level with apprentices at that stage required great decision of character, such as few possessed. It might be said that they should serve their apprenticeship before going to the institute. Now there are three periods, in one of which they must do it, if they do it at all—before going to the technical school, while there, or after they leave it. I believe the true place is *in* the school while pursuing their studies—that the manual instruction part *can* and *should* be put into the school course. Not one in twenty-five of those who go into apprenticeship with the idea of going to school afterwards ever go back to the school. Now, if it is possible for a man to get skill of hand without teaching, as he does by apprenticeship, then we as educators ought never to admit that we can not teach it in the school.

It may be asked what distinguishes the Russian system? It is this: *Trades* are built upon *art*. Art is fundamental. There are certain general practices underlying construction that we may call arts. Now we may teach these arts with or without teaching the constructions depending upon them. When we teach them without the constructions we abandon the idea of the artisan; we abandon the idea of manufactories. Now the Russian system does this, and teaches the arts just as we teach chemistry, in a laboratory, but previous to 1868 the School of Technology at Moscow followed the apprenticeship system in which the student learned the art only through the trade.

The first diagram that was exhibited during the lecture, shows how vise-work, as an *art*, underlies several familiar *trades*. The second diagram shows some of the natural divisions of vise-work. Vise-work divides into filing, sawing, tapping, chipping, reaming, thread cutting, breast drilling, etc. Vise-work is important to the blacksmith, die sinker, tool-maker, machinist, gunsmith, boss-finisher, iron mold-maker, jeweler, philosophical, nautical, or musical instrument makers, etc.

In adopting the Russian system at our institute we fixed upon vise-work for our first laboratory. We then decided to teach 32 students at a time at 32 branches with 32 vises, just as we teach analytical chemistry in a laboratory. The next thing was to obtain a man who had the requisite skill and then the capacity to work himself over according to these ideas. This was a matter of difficulty, for each would almost invariably ask what trade he was wanted to teach. When the right man was found the idea was developed in his mind by asking him what trade he was master of, and could teach, and when these were all named he was asked what fundamental manual skill was most essential in them all. In this case vise-work was decided upon. The next thing to be decided upon was the tools, and in our case tools for filing and chipping were selected.

(A case containing these tools used at the Institute was on exhibition during the afternoon. They consisted of a variety of files, chisels, calipers, saw and hammer.)

The next thing we wanted was a series of designs, the working out of which was best calculated to teach the use of these tools.

(A set of these designs was exhibited upon the walls of the room. There was also upon the table a set of drawings of these designs, made by the student himself. These drawings were soiled and blackened, and had actually been used by a student in working out the designs in metal. A case containing completed products corresponding to these drawings, and for each product the corresponding blank from which it was made, was also on exhibition, and the object of much interest. This case contained the actual work of one student during thirty lessons of four hours each, and comprised the following objects with their corresponding blanks: In filing to line, all cast iron—1, a flat surface; 2, an octagon; 3, a wedge; 4, a square hole; 5, an oval hole. In free hand filing, bench vise, cast iron; 7, check work; 8, ring work. In free hand filing hand vise, steel wire, 19, a point; 20, a rifle sight; 21; a screw blank; 22, a screw. In filing, 9, a cast iron fitting. In filing, fitting, 10, a steel rectangular slide; 11, a steel dove-tail slide. In chipping with flat chisel, 14, a half cylinder of wrought iron; 12, a chamfered surface of cast iron: 12, a reversed curved surface of cast iron. In chipping with half round chisel, 15, a half round chamfer in wrought iron; 18, a fluting in steel; 18, a spline work in

steel. In sawing, etc., 16, sawing in cast iron; 17, sawing and chipping in wrought iron; 6, sawing and filing to template in wrought iron. There was also on exhibition a case containing the products of 15 lessons of 4 hours each in forge work, but we can not enumerate them.)

Now the method is this: The student makes the drawing of the design, and in so drawing gets a vivid idea of the shape or form required, and some idea of how to produce that form. The teacher asks for this idea, and nothing is done until the method is clear in the mind of the student. An analysis of the work to be done is placed upon the blackboard and a certain value assigned to each element. The student notes this analysis and goes to work. The student thus knows himself just how much each point perfectly done will count in the inspection, and by aid of the analysis he is generally able to predict the quality of his own work within five per cent. In the laboratory thirty-two students are doing the same piece of work at the same time. Thus, the teacher has his own attention concentrated upon one point, and is able to oversee a large number of workers. (The remaining remarks were mainly disconnected statements, made in answer to questions.) The following is their substance:

At first we gave to the student five hours to do what a workman would do in one. At the close we gave him two hours for it. Not a man out of fifty-two students failed in this work, although worked in it more vigorously than in other studies, and in only one case was a student obliged to do the same piece a second time. There was no stumbling of the student, because the teacher was always present and always watching. It was the most astounding educational product that I have ever seen. Have questioned practical mechanics who have come to the institute, as to how the work compared with that of apprentices, and have invariably received the answer that it was far superior. Have asked them how it compared with the work of journeymen, and they have replied that they would choose a majority of our students in preference to a large proportion of the journeymen in their employ. They are astonished when told the time in which the work was learned and performed, and will hardly believe it. The work of 28 of the 52 students was worthy of public presentation. I think the method can be applied in any school and to any pupils who are physically able to do the work.

(The speaker here described an experiment in the city of Boston in which the method had been tried with very elementary students with very satisfactory results. He also distributed pamphlets containing an account of this experiment.)

In the Institute of Technology this work was done in addition to the regular studies, and I have yet to hear that it was done to the prejudice of their standing in those studies. As to the cost of this instruction, by having four drawers and four sets of tools to each bench we can put 128 students through this course in ten weeks. This will work our laboratory six days in the week and eight hours per day. In a year of fifty weeks we could put through five times as many, or 640 students in one year. Now for expenses; the rooms we had. It cost first about $1,000 to fit up the rooms with benches, vises and tools, each set costing $5.60. We paid our teachers $100 per month. I consider it feasible to have a high school with a shop of this kind that will not cost much more than it does now. Would put the pupil through one school at a time, as vise-work; then forge-work, then wood-work, etc. Would make these schools so educational in their character, that whether the student ever used the skill or not, the schools would be justified as an educational feature.

All begin the same piece of work, at the same time, and when it is finished, the pupil passes it in. We don't make salable articles because such are not the best for educational purposes. When the pupil makes an article that is fit to sell, it is not best, in an educational view, that he should make another of the same kind. The expense, too, is far less when articles are not made to sell.

The audience was large during these remarks, and manifested unusual interest in them. Several others made remarks but we have space only for those of Dr. Buchanan, who said that it is impossible for us to overrate the importance of industrial education as now developed. It has been thoroughly established by experience that education in the arts, and even a considerable amount of useful labor at the same time may proceed successfully in the entire course of education without interfering with the broadest and deepest mental culture that is possible. Certainly, then, there can be no difficulty in incorporating into every system of liberal education that thorough training in artistic skill proposed by Prof. Runkle, and even a special training in various practical arts by which each pupil may earn his subsistence or win his way to wealth. The pupils of the Ohio State Reform School who gave half their time to study and half to useful labor on the farm have made as good progress during many years as the pupils of the common schools who do no labor. So far from industrial interfering with intellectual culture, it really lends to it a powerful support by strengthening the character and developing the moral energies. It is upon these moral energies that the entire value of human character depends. The intellect itself can not attain a manly development without the development of a manly character. While industrial education thus becomes an assistant to intellectual growth and mental discipline, it is destined to revolutionize the world in its social condition, and that revolution is now beginning. It will certainly double the productive power of more than a million of laborers. If it makes these laborers (now worth a dollar a day) worth two or three dollars it will do more to elevate our population in the social scale, increase the general prosperity, and terminate the conflict of capital and labor than any agency now in the field of progress. Moreover, it will elevate the mechanic arts to an extent not dreamed of at present. The medical profession would be in a degraded condition, indeed, if it were acquired only by nursing the sick under a physician without schools, literature or instruction. The mechanic arts acquired only by apprenticeship, without any thorough intellectual teaching, are in that degraded condition to-day, and industrial education will do more than books and colleges have done for the professions. It will elevate their social status, increase their productive power and give us a new industrial world.

At the close of President Runkle's remarks and the animated discussion that followed, Professor Phelps, of Wisconsin, offered the following resolution:

Resolved, That the hearty thanks of this department be, and they hereby are, tendered to President Runkle, of the Massachusetts Institute of Technology, for the able, practical and satisfactory presentation of

the methods of instruction in industrial art now so successfully in operation in that institution.

Prof. Phelps warmly supported the resolution, remarking that the lecture of President Runkle had come as a new revelation to many earnest educators present, who had been anxiously grappling with the problem of industrial education, and who now felt that in the plans so admirably presented they could see light ahead. For his part he felt that no subject that had been brought before the association for years would prove more fruitful in beneficial results to the great question of the hour than this. The resolution was adopted by a rising and unanimous vote.

COMING IN AND GOING OUT.

THOSE who write and talk much for the public eye and ear must necessarily say many things which a less frequent utterance would leave them time to qualify. And they may make admissions which, with greater care, would be withheld. For instance, Mr. Gladstone, the British statesman, relates, in a recent address, that when he was a boy of four years old, he was taken to visit Mrs. Hannah More. She was a lady very famous in her day, and at the time of Master Gladstone's visit, Mr. Gladstone says Hannah More was "very old." When Gladstone was four years old, Mrs. More was sixty-eight; and that is Mr. Gladstone's present age. Whether he would like to be spoken of as "very old" is doubtful, since he takes, occasionally, the light amusement of felling a tree. Among his motives for such athletics there must enter the desire to show that threescore years and nearly ten have some pretence to youthful strength. Perhaps Mr. Gladstone has recognized Sterne's dictum, that it is every man's duty to plant a tree, and having planted trees in youth, takes the privilege of cutting them down in old age. But the lady who, at sixty-eight, looked very old to the boy of four, lived on till she was eighty-eight, and the world would probably be the gainer by it if Mr. Gladstone's green old age should also take him along for a score of years more.

The point of Mr. Gladstone's anecdote of this visit was, that Mrs. More presented him with a little book, saying, as she did so, that she gave it to him because he was just coming into the world, and she was just going out. The occasion at which the anecdote was related was at the exhibition of a grammar school, Mr. Gladstone delivering the prizes and accompanying the ceremony with the delivery of an address to the pupils. The application made was to impress upon the young the knowledge of the feeling in behalf of youth which comes upon those who are advanced in years. "They really wish," said Mr. Gladstone, "that they could enable you, who are now very young, to realize in your own minds, and get practical hold of many truths, that you will learn in the course of experience, in order that the learning of them may be more easy and the less bitter. There is an immense importance—an importance greater than you can measure—in all that you are now doing, and this day, in which we have met together for a single hour or less, may be—who knows?—a determining day in the life of some of you."

That the whole address was appropriate we need not say, for the many-sided mind of the speaker fits him for nice adaptation to time, place and audience. Neither is it necessary to make quotation of the sound advice which he gave to the young auditors, for it was what we often hear and read, though here marked with Mr. Gladstone's individuality. One striking passage we may transcribe: "Depend upon this: the purpose of this world is not limited to certain pursuits, considered as means of obtaining for us livelihood or distinction. There are many things made in this world from day to day, but the most important making that goes on is one that goes on most silently, and that is the *making of man*. Man is the great commodity, so to speak, which the whole structure of this world and of society has been organized to produce—to produce, I mean, a state of his nature in which all that is developed shall be developed in the best manner. The nature of man is capable of sinking to the most deplorable of depths of corruption, debasement, cruelty, and all things else that are bad. But it is also capable of noble things, if rightly handled—if we employ in a proper manner the means which Providence has placed in our hands."

It is to be hoped that these young people—including the youngest—will as faithfully remember their hour with Mr. Gladstone as he has remembered his visit to Hannah More. One cannot help thinking that the day of that visit, if it was not *the* determining day, was among the incidents which united in shaping a long and honorable career, and the "making of a man." Through all the cares and contests and vicissitudes of a long life, the arbiter of home and foreign governments, and the participant in whatever important question, lite

rary, social, political or religious was prominent, Gladstone remembers the pleasant and intelligent features which are familiar to us in many portraits—though probably when he saw her the fire of youth had been somewhat subdued by the gentle influence of years. He remembers the striking sentence of her salutation, "I am just going out of the world, you are just coming in," and he himself can now find no better words to speak to the young novices in life's experience.

None who read this probably can recall any personal interview with Hannah More. Those who could read before her works went out of fashion may, however, remember her as one of the best friends of their childhood. And all of us can recollect some sweet, aged face which beamed upon our infancy. To many the faithful, though well-worn, links of the past with the present are still preserved, and the gentle voice of age still speaks, "I am going out as you are coming in." It is a voice not to be disregarded. The kindly—though it seem to us over-careful—caution of those who are "going out" is not to be slighted by those who are just entering. And even such as have fairly reached the seat of life's conflicts may profitably run back in memory to the incidents of life's beginnings. *Public Ledger.*

DIM'S APOLOGY.

C. W. THOMPSON.

"YES, I really and truly am sorry, Kate, but that doesn't make it easy for a fellow to humiliate himself by asking pardon of an obstinate, conceited, wooden-headed—"

"Oh, hush, Dim! Please remember he is your teacher, and you ought to respect if you can't like him."

"I don't care; I can't respect a perfect block of conceit. Why, Kate, he has no more sympathy with boys than if they were so many fence posts set up in a row—not half so much as if they were Latin verbs or logarithms. I can think just how he will look while I am blundering through my apology. He will finger the buttons on his coat with one hand and drum a little on the desk with the other, and his eyes will be looking to the right and the left of me, and over me, and through me—everywhere but *at* me. Then when I have done he will cough slightly and bow an eighth of an inch and say, 'That will do, Blair; take your seat,' exactly as if I had bungled in explaining a problem. Oh! how can I do it!"

"I know it will be hard, Dim, but I think you would find it still harder to feel that you owed an apology that you hadn't made. And you know you really were wrong, and gave Mr. Bond some reason for being angry."

"But I was partly right—to begin with, anyway; and I shouldn't have talked half so strong if he had been willing to admit anything. But he never is."

"I am sure you are a little too hard on him, now, Dim. Remember how pleased he was last winter when you went through examination so splendidly, and his eyes fairly shone when you were reading your 'Hannibal.'"

"Yes, he felt as gratified as he would to have an equation come out right. It *was* a sort of interesting equation, you see, having his highly superior instruction for the first member, and my highly superior acquirements for the second. Considered as a kind of compliment to himself he may like me well enough, but as a boy he doesn't care whether he uses me decently or not. Oh! I can't and I won't stoop to ask his forgiveness. I'll quit school first."

Two large angry tears stood in Dim's blue eyes as he made this announcement, and an expression anything but sorrowful spread over his fair boyish face. Kate dropped her crocheting, rose and laid both hands caressingly on his shoulder, saying softly, "I want to be perfectly proud of my brother, and how can I be unless he does what he knows to be right—what he knows his mother would wish him to do if she were here?"

"Don't, Kate!" the anger suddenly evaporating from the great tears, leaving them pure and tender as tears should be. "I'll try and get to feeling right about it by morning, if I can. I said I was sorry a few minutes ago, but I don't believe I was in the right way. Now I'll devote my time and talents to the work of getting sorry."

"As a preliminary step suppose we go and practice duets awhile," said Kate, taking her brother's arm and leading him toward the parlor. "Perhaps music will prove a valuable assistant in your labor. Who knows?" A few minutes later their fresh young voices were rising and waving and falling in perfect harmony, and a yellow canary bird, hanging in the window joined in, and a lonely man passing under the window, felt as if he would like to join in too, if he had known how. But he didn't; so he only looked and listened a minute or two and passed on with a pleasant picture lying clear and bright on his mind, to look at afterward whenever he chose. A picture of a warm, bright room, softly curtained and brightly tinted, and a brother and sister sitting close together in the brightest, warmest part, making music for unfortunate shadows outside to dance to, if they felt like dancing.

The lonely man had a figure of medium height, a firm, decisive step, well-set head, and gray eyes and overcoat, the latter rather deficient as to nap and uncertain as to buttons, but the eyes neither deficient nor uncertain in any particular. He had, moreover, a black hat, which was like any other black hat except, that it showed a pointed determination to blow off; but this was overruled by the man's keeping hold of it with his one hand as he strode along. A shade had spread itself over the gray eyes, and several generations of wrinkles took up their abode between the brows thereof.

This lonely man coming from a visit to nowhere and hastening home to nobody, was Mr. Herbert Bond; and he was thinking as he pushed his way against the wind, "How happy they looked, Dimick Blair and his sister. It must be pleasant to have a sister with brown hair and a sweet voice, and pleasant to have a brother like young Dim. Of course, he will leave school after what passed to-day—he is much too proud to come back—proud as he is bril-

liant—and I humiliated him openly. But then he was arrogant and took too high a tone. It was a bad affair altogether, and I am sorry it happened, very sorry, for I liked the boy, and—how cosy they looked! how wonderfully comfortable and home-y."

Thus meditating, Mr. Bond in the course of time, reached his boarding place, thoughtfully let himself in, hung the shabby coat and opinionated hat in their accustomed places, and with less decisiveness than usual mounted the stairs to his room and sat down to a volume of Gibbon. But somehow Gibbon seemed uncommonly dull to-night, and when he looked off the book the same thing was the matter with his room; and taking a mental survey of life in general, he found that uncommon dullness was its predominant feature also. But at whichever thing he looked, there was shining beside it in sharp contrast that picture of warmth and love and happiness which he had just stolen and laid away for future contemplation. For some reason this wasn't the comfort to him that it should have been; instead of proving a good substitute for the reality of these things, it served only to make him feel his remoteness from all three—as a man might feel cast away alone upon an island watching the passing of the great white ships that never came near enough to take him in. After wrestling an hour with the "Roman Empire" and his own thoughts, and finding both insufferable, he threw them over and went to bed only to dream that Nero was Dimick Blair and had forgiven him, and wanted him to marry his sister for the good of Rome.

The next morning when the geometry class was reciting, and Mr. Bond, looking as superior and unsympathizing as ever, was busily employed in knocking down demonstrations and quarreling with deformed triangles, who should walk in but their schoolmate Dimick Blair? To the surprise of every body, but especially the teacher, he walked straight up to the desk, and said, his fine face flushing, but his eyes and voice clear and brave, "Mr. Bond, I was very wrong yesterday, and treated you disrespectfully. I am sorry for it now, and ask your pardon."

What a change came over the firm, cold face! The lips quivered, the gray eyes lighted up and then half filled, while Dim found himself grasped closely by both hands for an instant, and heard Mr. Bond's voice, wonderfully soft and deep, saying, "You have made me very happy, Blair. Now stand up and show these fellows the difference between a circle and a parallelogram; they don't seem to know this morning." And then Dim had to wipe his eyes and laugh, and the boys laughed and thought it was jolly, asking pardon.

"And it was all so different from what I thought it would be," said Dim, telling Kate about it afterward; "not hard a bit, and Mr. Bond is an old trump, after all, and cares lots more for us fellows than he pretends to. Don't you think, at recess, he came to me and said he was wrong too, yesterday, and he wasn't sure but he was the one to apologize; and stuff like that that made me feel awfully cheap. And I told him how mad I was at first, and how you coaxed me to come back and do the right thing, and how the music helped me, and all. When I told that, his eyes looked sort of wistful—he's got splendid eyes, Kate—and he said he would like me to ask my sister if he night come in once in a while and hear us sing, for an hour or so."

"Well, what did you tell him, Dimick?"

"Why, Katherina, I took the liberty of informing him that we would be most happy to see him at all times, and would warble in angelic style for his benefit, or something to that effect. Was that right Sis?"

"Altogether, my good boy, and I am quite proud of my brother just now."

"Then do let's have cream toast for supper, Katy. Humility has made me fearfully hungry."

Christian Union.

AN OPEN LETTER TO GIRLS.

MRS. E. A. JONES.

IF I could look into your bright faces, my dear girls, and catch the inspiration that comes from contact with your fresh young lives, I could better express what is in my heart to say to you. For years, I have rejoiced in your joys, and wept with your sorrows, have studied your habits and watched your growth, until I feel that I understand something of your nature and its needs. I know that in your hearts you have formed the ideal of a true life; that you have some conception of its meaning and purpose. Quickness of perception, power of judgment, and strength of will are yours; and yet you are more than likely to fail of doing the work which the world has a right to expect of you; more than likely to allow petty cares, petty interests, and petty enjoyments to absorb you. The world has women enough who are willing to do its tatting and crocheting, enough who are willing to meet its pie and cake necessities, but it too often asks in vain for the woman who can answer to its higher demands. Will not you, who have such fair opportunities for growth, show us a better maturity? Or will you, too, fail of ripening into the full bloom of which your girlhood gives promise? The question of your failure is a serious one, but implies on your part foibles rather than faults. You have been told that lack of purpose is the sole cause of your want of success, but you feel this to be unjust. You dream of great sacrifices, great attainments, great good accomplished, and you purpose to work your visions into realities; but your purpose has no place. Plan is what you lack.

During your school life you have a definite object to accomplish, you are ambitious for a place in the front rank of scholarship, and you obtain it. You may not do as good work as you would if your plans were more extended, but it is a significant

fact that you show a better record as compared with young men in these years than in any after-work of your life. Just where your plans end, theirs begin; where you sit down as though life were a task accomplished, they begin to live. Your work is simply one of preparation, and having fitted yourself with qualifications and equipped yourself with accomplishments, you have nothing to do but enter the matrimonial market and wait. You do not wish me to say this, but it is true; though you, of all others, are least to be blamed that it is so. Your purpose now is marriage, and delicacy forbids that you plan for that end. You are furnished with the capabilities and culture requisite to a career, but a husband is your only avenue to glory, and he must come to you unsought. You will not play the *rôle* of Becky Sharp, though you were to sit down for life with the spinster's traditional cat and cup of tea; neither will you idly wait for somebody to turn up, but with a pretense of busying yourself you will enter a profession, follow it in a half-hearted way, and convince the world that women can not fill even the ordinary avocations of life as well as men.

I do not wish to discourage in you the desire for marriage. Never forget for an hour that you were born to be a wife and a mother; the best and the holiest part of your nature awakens at this thought. Do nothing, engage in nothing that will unfit you for this sacrament; in its humblest presentation, its sacrifices and cares are more to be coveted than all that ease and self-indulgence can bring you. If God gives to you a home where love is law, know that he has entrusted you with the best gift of earth. Build your fairest castles and dream your brightest dreams, it has not been given to the imagination to picture a home more perfect than your love can make. Holland tells you: "The basis of a true married life lies in a true individual life." Your good sense teaches you that an aimless life is not a true one. If you are to make a happy home you have work to do. The light of love has gone out at many a hearthstone because the wife has failed to keep alive in her husband the interest her girlish charms awakened. Many a man only sees his wife by looking over his shoulder. They started life together but as the years go by the world educates him, her plan ended in matrimony and with it her culture.

But, however perfect your home may be, consider how little assurance you have of its security. "Death erects his batteries right over against it," and what to-day is light and gladness, to-morrow may be only darkness and desolation. What has a woman in such an hour? The very foundations of her happiness are gone. She may gather up the broken threads of her life and try to weave them into something like beauty; but the pattern is destroyed and the work must end in incompleteness. To a man, sorrow and suffering may come, but though his heart be broken, his life plan is not, and his work goes on; feebly it may be at first, but the world needs him, and every hour of labor brings balm to his wounds, and hope to his heart.

It may be a rather unpleasant suggestion, but has it never occurred to you that there is a bare possibility that your domestic qualifications may never be called into requisition? To be plain, that you may be among the "sad ungathered roses of your ancestral tree?" Marriage should not be your plan, but rather a part of it: just such a part of it as it is of your brother's. Josiah Allen's wife shows her good sense when she insists that if Tirzah Ann is to marry for a living, Thomas Jefferson shall do the same.

The young man who is starting out at your side is trying his powers; his friends and his consciousness are advising him as to what he shall do with the forces he finds coiled up within him; doors are opened for him, signals are hung out at the upper windows of the professions, men are beckoning him toward the best occupations, assuring him that there is always a place for a brave young fellow like him. Ask them what you shall do. Tell them that you are come from the same school, with as high a certificate of scholarship, that you are as ready for work and as willing to do it as he. They will look you over quizzically and say: I have known uglier girls than you who have married senators. True, but the wife of a senator may need other resources than a husband.

Ah, my dear girls, the path you have to tread has many rough passages, and the mantles cast over them by your Raleigh-like attendants belong only to the days of your youth and beauty; there will be places where you must walk over the cold, hard facts of your life unattended, and it may be with bare and bleeding feet. Let the plan of your life be broad enough to cover all such possibilities; full enough of interest to make you ignore the ruggedness of the way.—*National Teachers' Monthly.*

EDUCATIONAL APHORISMS.

THE expression of general truths in the form of aphorisms has some advantages over more extended statements, particularly in their brevity, pithiness, and point. The understanding grasps them as the keys to practical rules, and as guides in conduct; and the memory more readily retains them. It is not, however, to the uninformed, untrained mind, that such expressions are of the greatest use, but to those who, having already acquired by experience and reflection a good store of facts and ideas upon the subject treated, are glad to find them concentrated, as it were, in these small and convenient verbal repositories. No subject is richer in such aphorisms than education; and to no one will their study and acquisition prove more serviceable than to the practical teacher, eager to avail himself of the treasured experience of others. In these scintillations of wisdom, struck out from the minds of ancient and modern sages, philos ophers and educators, will be found an illumination sufficient perhaps to guide the humble explorer in the field of pedagogical lore, to the true path to professional success, as well as to the temple of speculative and practical truth. The few here given have been selected not only for their appositeness, but for their value as the exponents of correct education and teaching. Their arrangement by topics will not only serve to divest them collectively of their fragmentary character, but render them easy of reference and application. In regard to the value of aphorisms in general, Coleridge remarks: "Exclusively of the abstract sciences, the largest and worthiest portion of our knowledge consists of aphorisms; and the greatest and best of men is but an aphorism."

I. VALUE OF EDUCATION.

Man cannot propose a higher or holier object for his study than education and all that pertains to education.—*Plato.*

Man becomes what he is principally by education, which pertains to the whole of life.—*Plato.*

Man becomes what he is by nature, habit, instruction; the last two together constitute education, and must always accompany each other.—*Aristotle.*

There is within every mind a divine ideal, the type after which he was created, the germs of a perfect person; and it is the office of education to favor and direct these germs.—*Kant.*

Man is the product of his education.—*Helvetius.*

Of all the men we meet with, nine parts out of ten are what they are, good or evil, useful or not, by their education.—*Locke.*

Education is to inspire truth, as the supreme good, and to clarify the vision of the intellect to discern it.—*Mann.*

Education is the one living fountain which must water every part of the social garden, or its beauty withers and fades away.—*Everett.*

II. SCOPE OF EDUCATION.

The object of education is not external show and splendor, but inward development.—*Seneca.*

A good education consists in giving to the body and the soul all the perfection of which they are susceptible.—*Plato.*

Education can improve nature, but not completely change it.—*Aristotle.*

The object of the science of education is to render the mind the fittest possible instrument for discovering, applying, or obeying the laws under which God has placed the universe.—*Wayland.*

The first principle of human culture, the foundation-stone of all but false, imaginary culture, is, that men must, before every other thing, be trained to do somewhat. Thus, and thus only, the living force of a new man can be awakened, enkindled, and purified into victorious clearness.—*Carlyle.*

The object of education ought to be to develop in the individual all the perfection of which he is capable.—*Kant.*

I call that education which embraces the culture of the whole man, with all his faculties,—subjecting his senses, his understanding, and his passions to reason and to conscience.—*Fellenberg.*

I call a complete and generous education that which fits a man to perform justly, skillfully, magnanimously, all the offices, both private and public, of peace and war.—*Milton.*

All true education is a growth; the mind is not a mere capacity to be filled like a granary; it is a power to be developed.—*Wickersham.*

The object of education is rather to form a perfect character, than to qualify for any particular station or office.—*Potter.*

The educator should not so much form and instil, as develop and call out.—*Michaels.*

The school is the manufactory of humanity.—*Comenius.*

III. TEACHER AND PUPIL.

Nature without instruction is blind; instruction without nature is faulty; practice without either of them is imperfect.—*Plutarch.*

The fittest time for children to learn anything, is when our minds are in tune, and well disposed to it. —*Locke.*

Let the tutor make his pupil examine and thoroughly sift everything he reads, and lodge nothing in his head upon simple authority and upon trust.—*Montaigne.*

Let the child learn what is appropriate for his years, and not precociously what he ought to learn afterwards.—*Rousseau.*

To learn is to proceed from something that is known to the knowledge of something unknown. —*Comenius.*

Perverseness in the pupil is often the effect of frowardness in the teacher.—*Locke.*

The great skill of a teacher is to get and keep the attention of his scholar; whilst he has that, he is sure to advance as quickly as the learners' ability will carry them.—*Locke.*

It is the teacher's character that determines the character of the school; not what he does so much

as what he is. The maxim is a true one; As is the teacher, so is the school.—*Currie.*

Teachers should observe the following rules: 1. Never to correct a child in anger. 2. Never to deprive a child of anything without returning it. 3. Never to break a promise. 4. Never to overlook a fault. 5. In all things, to set before the child an example worthy of imitation.—*Wilderspin.*

It matters not how learned the teacher's own mind may be, and how well replenished with ideas, and how mild soever he sees them, there is a power beyond this necessary, to produce copies of these ideas on the minds of others.—*Craig.*

Those studies should be regarded as primary, that teach young persons to know what they are seeing, and to see what they otherwise would fail to see.—*Blackie.*

Long discourses and philosophical reasonings, at best, amaze and confound, but do not instruct children.—*Mocke.*

It is as important *how* children learn, as *what* they learn.—*Mayo.*

A skillful master who has a child placed under his care, will begin by sounding well the character of his genius and natural parts.—*Quintilian.*

Rules should not be set before examples.—*Comenius.*

Actual tuition is better than demonstration.—*Comenius.*

At first it is no great matter how much you learn, but how well you learn it.—*Erasmus.*

Study is the bane of childhood, the ailment of youth, the indulgence of manhood, and the restoration of age.—*Landor.*

A teacher ought to know of every thing much more than the learner can be expected to acquire. He must know things in a masterly way, curiously, nicely, and in their reasons.—*Everett.*

The teacher should create an interest in study, incite curiosity, promote inquiry, prompt investigation, inspire self-confidence, give hints, make suggestions, and tempt pupils on to try their strength and test their skill.—*Wickersham.*

There is frequently more to be learned from the unexpected questions of a child, than from the discourse of men who talk in a road, according to the notions they have borrowed, and the prejudices of their education.—*Locke.*

From everything noble the mind receives seeds, which are vivified by admonition and instruction, as a light breath kindles up the spark in the ashes.—*Seneca.*

Curiosity in children is but an appetite after knowledge; and, therefore, ought to be encouraged in them, not only as a sign, but as the great instrument nature has provided to remove that ignorance they were born with.—*Locke.*

Clearness of ideas must be cultivated by exercising the intuition, and the pupil must be educated to independent activity in the use of his own understanding.—*Seneca.*

Ideas before words; principles before rules; the judgment before the memory; incidental information before systematic; reading before spelling; the sounds of the letters before their names; and, on the whole, nature before art.—*Craig.*

The school should cautiously beware of making sacrifice to the arrogant requirements of the spirit of the age; which, when it takes a wrong direction, promotes nonsense, and desires to study by steam.—*Stow.*

Arouse in the child the all-powerful sense of the universe, and the man will rise above the world; the eternal over the changeable.—*Richter.*

The process of enlightening the mind should not be like lightning in the night, giving a strong light for a moment, but only blinding it, and then leaving everything dark again; but like daybreak, which renders everything gradually light.—*Fischer.*

Human perfection is the grand aim of all well-directed education; the teacher should have ever present with him his ideal man, whose perfections he would realize in the children committed to his care, as the sculptor would realize the pure forms of his imagination from the rough marble that lies unchiseled before him.—*Wickersham.*

IV. TRAINING AND HABIT.

Train up a child in the way he should go, and when he is old he will not depart from it.—*Solomon.*

Training is developing according to an idea.—*Schwarz.*

No teaching or lecturing will suffice without training or doing.—*Stow.*

You cannot by all the lecturing in the world enable a man to make a shoe.—*Johnson.*

Nature develops all the human faculties by practice, and their growth depends upon their exercise.—*Pestalozzi.*

The intellect is perfected not by knowledge, but by activity.—*Aristotle.*

The end of philosophy is not knowledge, but the energy conversant about knowledge.—*Aristotle.*

The great thing to be minded in education is, what habits you settle.—*Locke.*

Infinite good comes from good habits; which must result from the common influence of example, intercourse, knowledge, and actual experience: morality taught by good morals.—*Plato.*

It is habit which gives men the real possession of the wisdom which they have acquired, and gives enduring strength in it.—*Pythagoras.*

A man is not educated until he has the ability to summon, on an emergency, his mental powers in vigorous exercise, to effect his proposed object.—*Webster.*

The result of schooling is a mind with just vision to discern, with free force to do; the grand schoolmaster is Practice.—*Carlyle.*

Habit is a power which is not left to our option to call into existence or not; it is given to us to use or abuse, but we cannot prevent its working.—*Currie.*

> The mind, impressible and soft, with ease
> Imbibes and copies what she hears and sees,
> And through life's labyrinth holds fast the clew
> That education gave her, false or true.
>
> —*Cowper.*

V. DEVELOPMENT OF THE FACULTIES.

All our knowledge originates with the senses, proceeds thence to the understanding, and ends with the reason, which is subordinate to no higher authority in us, in working up intuitions, and bringing them within the highest unity of thought.—*Kant.*

The power of reflection, it is well known, is the last of our intellectual faculties that unfolds itself; and, in by far the greater number of individuals, it never unfolds itself in any considerable degree.—*Stewart.*

Clearness of ideas must be cultivated by exercising the intuition, and the pupil must be educated to independent activity in the use of his own understanding.—*Niemeyer.*

The laws which govern the growth and operations of the human mind are as definite, and as general in their application, as those which apply to the material universe; and a true system of education must be based upon a knowledge and application of these laws.—*Henry.*

Knowledge begins with perception by the senses; and this is, by the power of conception, impressed upon the memory. Then the understanding, by an induction from these single conceptions, forms general truths, or ideas; and lastly, certain knowledge arises from the result of judgments upon what is thoroughly understood.—*Comenius.*

The mind may be as much drawn into a habit of observation and reflection from a well-directed lesson on a pin, as from the science of astronomy.—*Craig.*

During early childhood enough is done if mental vivacity be maintained.—*Taylor.*

The conceptive faculty is the earliest developed, and the first to reach its maturity: it moreover supplies materials and a basis for every other mental operation.—*Taylor.*

VI. LANGUAGE.

Things and words should be studied together, but things especially, as being the object both of the understanding and of language.—*Comenius.*

He who has no knowledge of things will not be helped by a knowledge of words.—*Luther.*

The signs of thoughts are so intimately associated with thought itself, that the study of language, in its highest form, is the study of the processes of pure intellect.—*Everett.*

Speech and knowledge should proceed with equal steps.—*Comenius.*

We cannot express in words the thousandth part of what we actually think, but only a few points of the rapid stream of thought, from the crests of its highest waves.—*Zschokke.*

Language is the sheath in which is kept the sword of the mind; the casket in which we preserve our jewel; the vessel in which we secure our drink; the store-house where we lay up our food.—*Luther.*

Thinking is aided by language, and, to a great extent, is dependent upon it as its most efficient instrument and auxiliary.—*Potter.*

VII. SELF-EDUCATION.

The primary principle of education is the determination of the pupil to self-activity—the doing nothing for him which he is able to do for himself.—*Hamilton.*

The peculiar importance of the education of childhood lies in the consideration, that it prepares the way for the subsequent self-education of manhood.—*Currie.*

Self-activity is the indispensable condition of improvement; and education is only education—that is, accomplishes its purposes, only by affording objects and supplying materials to this spontaneous exertion. Strictly speaking, every man must educate himself.—*Hamilton.*

The child learns more by his fourth year, than the philosopher at any subsequent period of his life; he learns to fix an intelligent sign to every outward object and inward emotion, by a gentle impulse imparted by his lips to the air.—*Everett.*

If all the means of education which are scattered over the world, and if the philosophers and teachers of ancient and modern times were to be called together, and made to bring their combined efforts to bear upon an individual, all they could do would be to afford the opportunity of improvement.—*Degerando.*

VIII. MORAL EDUCATION.

The best-trained head along with a corrupt heart, is like a temple built over a den of robbers.—*Tegner.*

Head and heart constitute together the being of man, and he who is sound in one only is a cripple.—*Stow.*

It holds as a rule in mental as well as in moral education, that the learner should be habituated to what is right before he is exercised in judging what is wrong.—*Currie.*

If you can get into children a love of credit, and an apprehension of shame and disgrace, you have put into them the true principle, which will constantly work and incline them to the right.—*Locke.*

Man may be said originally to be inclined to all vices; for he has desires and instincts which influence him, although his reason impels him in an opposite direction.—*Kant.*

In my opinion, the first lesson which should quicken the understanding of the young, should be intended to form their morals and their perceptions; to teach them to know themselves, to live well and die well. —*Montaigne.*

Direct teaching on moral ideas and principles is an important part of instruction.—*Hegel.*

Faith in God is the source of all wisdom and all blessings, and is nature's road to pure education of man.—*Pestalozzi.*

He that will have a son have a respect for him and his orders, must have a great reverence for his son "Maxima debetur pueris reverentia.—*Locke.*

A properly conducted school is a sort of moral gymnasium, preparatory to the great struggle on the arena of life.—*Craig.*

Morality is infancy founded on the authority of the parent, acting with the support of habit and association; what he commands is law; the virtue of childhood is summed up in obedience.—*Currie.*

In man, the ideal is older than the actual. The lofty lies nearer the child than the debased. We measure time by the stars, and reckon by the clock of the sun, before we do of the city clock.—*Richter.*

Love awakens love; and a cold and heartless education usually produces a pupil of the same character.—*Fischer.*

Children should live in their paradise, as did our first parents, those truly first children.—*Rousseau.*

IX. DISCIPLINE AND GOVERNMENT.

Correct thy son, and he shall give thee rest; yea, he shall give delight unto thy soul.—*Solomon.*

He that spareth his rod hateth his son; but he that loveth him chasteneth him betimes.—*Solomon.*

No father inflicts his severest punishment, until he has tried all other means.—*Seneca.*

A principal point in education is discipline, which is intended to break the self-will of children, in order to the rooting out of their natural tendencies.—*Hegel.*

There is one, and but one fault, for which children should be beaten; and that is obstinacy or rebellion. —*Locke.*

Beating is the worst, and, therefore, the last means to be used in the correction of children.—*Locke.*

The shame of the whipping, and not the pain. should be the greatest part of the punishment.—*Locke.*

No frighted water-fowl, whose plumage the bullet of the sportsman has just grazed, dives quicker be-

neath the surface, than a child's spirit darts from your eye when you have filled it with the sentiment of fear.—*Mann.*

A school can be governed only by patient, enlightened, Christian love, to the master principle of our natures. It softens the ferocity of the savage; it melts the felon in his cell. In the management of children it is the great source of influence; and the teacher of youth, though his mind be a store-house of knowledge, is ignorant of the first principle of his art, if he has not embraced this as an elemental maxim.—*Everett.*

Angry feelings in a teacher beget angry feelings in a pupil; and if they are repeated day after day, they will at last rise to obstinacy, to obduracy and incorrigibleness.—*Mann.*

The evil of corporal punishment is less than the evil of insubordination or disobedience.—*Mann.*

It is the teacher's duty to establish authority; peaceably, indeed, if he may,—forcibly, if he must. —*Page.*

There are usually easier avenues to the heart, than that which is found through the integuments of the body.—*Page. From the Educational Cyclopædia.*—(E. STEIGER.)

READING.

READING lies at the basis of all school instruction: it is the key to all study. Nine-tenths of all the reading the average pupil will do after leaving school will be done for the purpose of *gaining* information, not for the purpose of *imparting* it. This fact should determine the method of teaching reading. Nine-tenths of the teacher's time and energy given to this subject should be directed to helping the child understand and get the *thought* out of what he reads, and nine-tenths of the pupil's time and study should be directed to the same purpose. The other one-tenth of time and work may be properly spent in securing the proper expression of the thought. The fact is that when a person is thoroughly possessed of the thought and feeling of the author, the proper expression comes of itself. The thought determines the expression. The thought is the soul of which the expression is the body. The thought determines almost wholly the tone of voice, the emphasis, the inflection, the gesture, the pauses; the only things it does not determine and secure are distinct enunciation and proper pronunciation. These may be called the artificial or rather the mechanical elements of speech, and need special drill.

In teaching reading, a little time should be given to drill upon the elementary sounds and only a little, as the exercise in properly enunciating words used, will secure all that is desirable, additionally, in the way of cultivating the vocal powers. This being done, a proper understanding of the subject-matter insures its proper expression.

Reading may be divided into silent and oral reading. Silent reading consists in interpreting the thought and sentiment of an author, and making them your own. For the purpose of gaining information, this is all that is necessary. Oral reading is wholly dependent upon the silent. Oral reading that is not founded upon an understanding of what is read, is not *reading* at all—it is simply *sound*—mere "parrot work."

Much of the execrable reading we hear in the schools arises from the fact that teachers begin at the wrong place. They begin by asking the child to express thought before he has any thought to express.

PRACTICAL SUGGESTIONS.

In teaching reading, 1. *Begin* with "words;" 2. Combine the words into statements or sentences; 3. Very soon learn the elementary sounds of the simple words; 4. Learn the letters by name incidentally; 5. Spell by letter; 6. Never allow a pupil to use a word that he does not know the meaning of; 7. Require the pupil from the first to recite in his *talking tone* of voice; 8. Never allow a pupil to *attempt* to read until he knows what he is going to read about; 9. Before allowing the child to read orally, be sure that he knows the words (*a*) as to their pronunciation; (*b*) as to their meaning; 10. After mastering the words as words, be sure that the child has the thought, and this can only be secured by requiring him to give the thoughts in his own language; 11. After this study of the thought of the lesson, allow the child to *read;* 12. If he does not read well, the probability is that he does not comprehend the thought, so ask questions and explain; 13. The teacher may sometimes give the pupil an example, but he should not make a practice of reading first and then asking the pupil to imitate; 14. Do not talk to a child about pauses, emphasis, inflection, etc., but say, rather, "what does this mean?" then, how do you *say* it; 15. The teacher who teaches reading by reading first and asking the children to imitate, or who is continually saying, "let your voice fall here," "keep up your voice there," "emphasize this word," "that should have the falling inflection," may succeed in training pupils to read certain selections well, but will fail utterly to make good readers.—*Indiana School Journal.*

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, NOVEMBER, 1877.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

CERTAIN important business was referred by the Louisville National Teachers' Association to the Department of Superintendence to be acted upon at the contemplated meeting, at Washington, during the session of Congress. There is other business of scarcely less importance which would naturally come before such a body. The Department will meet probably early in December. An effort will be made to secure the attendance of representative educators from States North and South, East and West. Each State Superintendent will be asked to bring with him a *body* of the best men he can select. It will be a meeting for work—for business—*a congress of educators*. Let the note of preparation be sounded at once.

THERE is a great Japanese Exhibition now open at Tokio. It is modeled in most respects after the Philadelphia Exposition. There are three general exhibition buildings, with Agricultural, Horticultural and Machinery Halls, and an Art Building. There is also an Educational Department, very much like the Pennsylvania Educational Hall at the Centennial, in which is displayed a large collection of school apparatus and appliances, and scholars' work. They have a model school-room in which methods of instruction are exemplified by actual teaching, thus making a Pennsylvania idea practical in Japan.

PRESIDENT HAYES, in his message to Congress, urges the propriety of making provision for the appointment of a Commission to take charge of the material which may be sent from the United States to the Paris Exposition, and an appropriation to pay the expenses which may be incurred in making the exhibit. We hope this recommendation of the President's may be adopted; and, if so, we further hope that some well-known friend of education may be placed on the Commission, and intrusted with the task of making the best possible exhibit of the systems of public instruction in the United States. As a whole, we did not do ourselves justice at the Centennial; and now with the right man to organize the exhibit, and money to pay the necessary expense, we can make good what we lost at Philadelphia. We have nothing in this country that we can show the people of the Old World which will interest them so much as our schools and school systems. The crowds of intelligent foreigners who came to Philadelphia expressly to study education, prove how widespread is the interest abroad in this subject. They expect us to meet them with an educational exhibit at Paris, and our country will do itself a wrong not to do this.

Is it fair to judge in any manner of the efficiency and professional spirit of a body of teachers by the number of educational periodicals and books they read? Can much be expected of the teachers of a county or city not one of whose names is to be found on the list of subscribers for any paper or magazine published in their interest? What must be thought of a Superintendent of schools who is satisfied to allow the teachers in his jurisdiction to totally neglect all professional reading? What can he expect of them? Is improvement in the schools possible? Let some of our Pennsylvania Superintendents inquire how many educational papers and magazines are taken by the teachers to whom they give certificates. Let them also find how many books they have read, and what books they are reading now. If they do not discover some facts that will astonish them, our statistics are at fault.

WE have received from Sir Charles Reed, President of the school board of London, England, that part of the official report of the English Commissioners to the Philadelphia International Exposition which relates to education. It is a very interesting document. We have also received from the same source the "Annual Statement" of the President of the London School Board, made September 26th, 1877. We shall take pleasure in giving extracts from these valuable papers in a future number.

THE Ercildoun Seminary in Chester county was almost totally destroyed by a tornado during the past summer. The loss to the proprietor, Mr. Richard Darlington, was $10,000. Many men would have gone down under such a blow, but, with characteristic

energy Mr. Darlington within a few days after the calamity, abandoning the ruins at Ercildoun, purchased a valuable property of twenty-six acres near West Chester and began the erection of suitable buildings for re-opening the Seminary at that point. The buildings are now complete, and the Seminary opens with some sixty or seventy boarders, all that can be accommodated, many applicants having been refused admission.

THE Convention of Directors of the Poor recently in session at Lock Haven, passed the following resolution:

Resolved, That, in order to prevent the evils arising from the association of dependent children with adult paupers, we recommend that they be provided for in orphans' homes, or asylums now in operation, or in those that may be established, to be supportod by private contributions and by aid, encouragement and co-operation from the State, and from counties, boroughs and cities in which they are located, and be subject to the supervision of the Superintendent of Public Instruction and the Board of Public Charities.

FROM *L'Avvenire della Scuola*, published at Naples, Italy, we translate the following pregnant item:

You can never make too great efforts to accustom children to be sincere; without sincerity a good education for them will be impossible. For how can you guide with intelligence and success him whom you do not know? And how can you know him who is guilty of lying?

These Italians, however we may seek to depreciate them, evidently hold up a standard of character which is, unfortunately, by no means universal among ourselves.

THE public-spirited school board of the township of Marion, in Berks county, erected during the past summer, at the pleasant little town of Stouchsburg, a two-story, four-roomed school house. The dedication took place on Saturday, the 13th of October. There were also appropriate religious exercises on the following Sunday. The two upper rooms were thrown together and beautifully decorated with evergreens, flags, pictures, mottoes, etc. About five hundred people, from all parts of the township and from neighboring townships, were present on Saturday afternoon. Addresses were delivered by State Superintendent Wichersham, County Superintendent Baer, Rev. Dr. Leinbach, Prof. N. C. Schaeffer and others. Good music enlivened the exercises. The whole board of directors were present, and had great reason to feel proud of their work. The house is convenient and well-built. Great economy has been used in its construction. The lot on which the house stands contains one acre and a quarter, and it has already been neatly fenced. The liberal citizens of the town have laid a flagstone walk to the house, and placed a fine bell in the cupola. The higher department of the school is intended for all the advanced scholars of the district.

WE learn that the West Chester Normal School has as principal of the Model School a regularly trained Kindergarten teacher, and for the past two years the graduating classes from this school have received systematic instruction in the essential principles of Kindergarten teaching. There is at present a small class working on the most important gifts.

The Misses Gleim, of Lebanon, graduates of the St. Louis Kindergarten Training School, have recently opened a Kindergarten in Lancaster. The school promises to be well patronized, and it is in excellent hands. We wish it all success.

THE New York *World* furnishes the following statement of the gifts to different American colleges during last year: Harvard received $52,375; Trinity College, Hartford, Conn. (Episcopalian), $20,000; Bowdoin College, Brunswick, Maine (Congregational), $6,000; Hamilton College, Clinton, N. Y. (Presbyterian), $4,000, Wesleyan University, Delaware, Ohio, (Methodist), $20,000; University of Virginia, $130,000; Washington and Lee University, Lexington, Va., $43,000; Lehigh University, Bethlehem, Pa. (under Episcopalian influence), the annual running expense, from its founder, Asa Packer, $50,000; Tufts College, Medford, Mass. (Universalist), $40,000; Johnson College, Quincy, Ill., a new institution, $30,000; Wabash College, Crawfordsville, Ind. (Presbyterian); $128,000; Oberlin College, Ohio (Congregational), $10,000; Berea College, Kentucky, $10,000; Tabor College, Iowa, $50,000; University of Pennsylvania, West Philadelphia, $50,000.

AN interesting article, entitled "The Slaughter of Innocents," in the Louisville *Courier-Journal*, ends as follows:

They have rights that the teacher ought to respect, unlimited despot thought he be; and though nominally our school system is carried on for the benefit of the child, still it perceives in some dim way that the system exists not primarily for the benefit of the

children, but for the ease and comfort of parents, to relieve them from the responsibility put upon them by divine authority, and to directly promote their prosperity by the increase of intelligence. The average child is too sharp to be grateful for the education that comes to him in so selfish, and crude, and irksome a shape, and not intelligent enough to perceive how the system of education, against which his whole nature properly rebels, is slowly and surely growing more humane and better adapted to child-nature year by year. He knows that in many aspects it is horrid, and that the temptation to play hookey or to beg off for a day does not need to be very great to carry him away. A bright day for nutting, or a cloudy day for fishing, or a frosty day for hunting, or a warm day for absolute shirking, will always prove sufficient, and small blame to him. Meantime there is an influence steadily at work to pile upon his docile and willing shoulders heavier burdens in the shape of dry, dogmatic studies, abstract and complicated in their nature, that may bring his young spirits down to an early grave of dull apathy and stolidity, that will take the light out of his heart and make him a prig, a pedant, and a dullard before he be grown. And then again, there is another influence at work that grows mightier every year, whose end it is to make the education of the child a portion of his easy, natural development, founded upon his God-given instincts, recognizing his entire nature, directing and developing all healthily, harmoniously, and happily. Let us acknowledge that the last is the wisest; the only true plan; let us all encourage the able and loving teachers who are trying to find out the true principles upon which it is founded, and let us never rest content with our present system, but steadily, and slowly, and systematically labor together to improve it.

MISS E. CLEMENT, of Germantown, in this state, writes to the *National Teachers' Monthly* that steps have been taken toward the founding of an institution called the "Teachers' Rest," for the benefit of infirm and invalid teachers. She says:

The originators of this enterprise are ladies who have been long personally engaged in teaching and the need of such an institution they know to have been painfully felt in cases that have come under their own observation. They think it is an object which will interest all members of the profession; and in appealing to the benevolent public for aid in beginning their work, they look chiefly to the prosperous among their own number to provide for its continuance and extension. They have not proposed one gigantic establishment, but rather hope for a multiplication of small households in various localities, as they may be called for, as more conducive to that homelike atmosphere which it is so desirable to preserve. The object of "The Rest" is primarily for the reception of those who are worn out by a long course of teaching, and these may claim its care indefinitely; but it is hoped also that its shelter may be extended to those temporarily out of employ or needing a short respite from work. As women of independent spirit—as teachers are apt to be—naturally shrink from applying for admission into a "charitable institution," it is wished that this shall never be so regarded. A rate of board, $4 as a maximum, will be charged; but this will be reduced or remitted by the managers, according to the circumstances of the applicant. A building has been selected for the beginning of the work, on the Hudson river, at Stony Point. It will accommodate 12 inmates. About $6,000 are needed for the purchase and outfit of the building, and the committee on contributions ask for help in raising this amount. Donations of furniture, household linen, etc., etc., would be most acceptable, and promises of annual subscription to the fund of the "Rest" will also be gladly received. The institution will be a corporation.

VIEWS OF A BUSINESS MAN.

THE New York *Tribune*, some weeks ago, contained an account of an interview with Mr. F. S. Winston, President of the Mutual Life Insurance Company of New York, on the Chinese question as it presents itself in California. Mr. Winston, it appears, has spent much time in California, giving attention to the interests of that State, both industrial and moral. It is not our purpose to quote here what he says of the question which was the principal topic of discussion during the interview; but only to present some opinions which were indirectly expressed upon the effects produced upon the children of the working classes by the kind of common school education which they receive. We do not endorse Mr. Winston's views; but he is a sharp business man, and what he says deserves to be well considered. If it is even in part true that the instruction in our public schools is calculated to create a dislike for labor; if tastes and habits are therein developed that unfit the children of farmers, mechanics and working-men from following the kinds of business which their fathers have followed, there is something wrong about the system, internal or external, which cannot be too soon righted. This *Journal* has on many occasions advocated the supplementing of our system of public instruction by a system of industrial schools. We are more and more convinced that this must sooner or later be done. But read the plain strong words of Mr. Winston:

Miners and persons engaged in industrial and mechanical pursuits, and laborers living in San Francisco with their families, send their children to the public schools. While these schools are mainly conducted upon the same principles and methods as those in the East, more attention is paid to music and other branches of education of that kind; and the children, while at school to acquire knowledge, are noticed also to acquire a distaste for laborious pursuits. They come from these schools with ideas that will not suffer them to perform the duties of day labor or to enter into mechanical occupations, and the result is they become an idle, dissipated and mischievous class. This viciousness, unfortunately, is not confined to boys, but idleness and degradation exists nearly as

much among the female portion of that class as among the male portion. Many of them have no resources to support themselves in idleness, and the result is that petty robberies and all sorts of criminal conduct naturally follow. The excuse they offer for not engaging in laborious pursuits is that they will not degrade themselves by submitting to competition with Chinese labor, and as that kind of labor is one of the main reliances of the people of that State, idleness on the part of the "hoodlums" follows, while the work is performed by the Chinese.

TECHNICAL EDUCATION.

THE MISSING LINK SUPPLIED.

AT a meeting of the Board of Trustees of the Polytechnic College of the State of Pennsylvania, held in Philadelphia, February 26th, 1877, the following resolution was adopted:

Resolved, In view of the necessity for the better preparatory training of technical students, that the President of the faculty be and he is hereby authorized to prepare a course of studies for a "Preliminary Year" or preparatory department, and organize said department, the qualifications for admission to which shall be those now required of teachers in the Common Schools of this Commonwealth.

The importance of the above action will be better understood when it is remembered that in this country technical education has never been organized into a progressive system. The pupil of our grammar, graded, high, or normal schools who wished to pursue a technical course, found himself almost entirely unprepared, except in the single study of mathematics. Did he wish to pursue a classical course, he found academies everywhere, especially designed to train him for admission to the literary college; academies in which the whole time of the Principal is employed in drilling the Latin and Greek classes, and that work is doubtless well-done. But the youth who wishes to prepare himself for the honorable and lucrative calling of civil or mechanical engineer, architect, furnace-builder and manager, mine-engineer or chemist, has no such opportunity. When he leaves the Grammar school there is no such place provided where he can especially pursue a course preparatory to entering upon his professional studies. He has to get a little instruction here, and a little there, and the baneful effects of im perfect preparation follow him throughout his future career. In fact, it may be said that neither institutions devoted to Techni cal Education nor their students have had a fair chance in America, because the link between those institutions and the Grammar school has always been missing.

In Europe it is not so. There the technical student is provided with a regularly progressive course, arranged to fit him thoroughly for the applied studies which are to follow. Now this is just what he needs here, and what the above action of the corporators of the Polytechnic College is going to supply in the course of their "Preliminary Year." The time seems short, but as none but *industrious* youths are supposed to aspire to the industrial professions, it is doubtless long enough for the introduction of drawing, and the elements of experimental science and natural history in which intelligent foreigners who visited us last year found our schools so lamentably deficient, as compared with theirs. Despite these obstacles, Technical Education has during the last quarter of a century, made rapid strides, and the Polytechnic College has reason to be proud of the success which has attended her graduates. With the facilities for admission afforded by the organization of the Preliminary Year, she will doubtless have a large accession to her classes.

ARE OUR SCHOOLS WEAK?

THE following article appeared editorially in the Philadelphia *Times*, of August 30th.

THE WEAKNESS OF OUR SCHOOLS.

The annual examination of candidates for admission to the Military Academy at West Point, which began yesterday, differs from similar examinations at most of our schools and colleges, in that it is actually meant to and does thoroughly test the candidates' proficiency. And unless this year's examination differ materially from those of previous years, its result will startle those who stop to think what it implies. Though a rigid examination, it is still a simple one, and any grammar school boy would feel himself entirely qualified to undergo it. All that is required of the candidates is that they shall be "well versed in arithmetic, reading and writing, including orthography, and have a knowledge of the elements of English grammar, of descriptive geography, especially of their own country, and of the history of the United States." It will be observed that these requirements are simpler—upon paper—than those for admission to the High School, and much less than is demanded of a matriculant in the poorest of our colleges. Every school boy is supposed to have this knowledge at fourteen, and at nineteen, which is the average age of the nominees to West Point, he is far beyond troubling himself about such rudimentary studies as these. But mark the result. Last June out of a hundred and sixteen nominees, including the Presidential nominees at large, fifty-eight, or

just one-half were rejected by the examiners. At the Naval Academy at Annapolis the proportion rejected was even greater, fifty-eight per cent. There have been accusations of favoritism at Annapolis, but favoritism could at most account for very few rejections, and under the system of written examinations at West Point nothing of the kind is possible. The naked fact is that of a hundred and more picked young men, from fourteen to twenty-one years of age, chosen from all parts of the country, and not a few of them by competitive examination in the public schools, only one-half are found to have that thorough grounding in the elements of an English education which all our schools profess to give.

There is a text for many sermons in this—a text upon which teachers and school directors may profitably ponder just at this time, when the new school term is opening and the scholars are coming back to their work. What is required for admission to West Point is what every American citizen ought to have, and precisely what our common schools are designed to teach. As a matter of fact, it is precisely what one-half of them do not teach. No doubt many of these rejected candidates could answer questions that would sound much harder than those put to them at West Point. Many of them could tell a great deal about various abstruse sciences, if the examiners had only asked them; but when it came to "the three R's," and a little knowledge of their own country, they found that their schooling had profited them little. And many who do not go to West Point, but have to stand the test of experience in the world, make the same painful discovery. They may have spent years in the school room and obtained a smattering of information upon all sorts of subjects, but the only use they find for it is to forget it and begin their education all over again. If we are ever going to make our public schools of real value, we have got to bring them back to their proper work. With all our fine school houses and costly apparatus and elaborate text-books, the true idea of a common school has been almost forgotten, and we believe it quite safe to say that what used to be called a sound English education was better supplied in the simple road-side school house of a generation back than today in the most sumptuous brown stone building.

The test for admission to the West Point Academy was established many years ago, and it was intended to insure just that fundamental instruction that was deemed essential before a young man could profitably enter upon the special training required to fit him for the profession of arms. It is this fundamental instruction, and only this, that the common schools should supply. The special training for a trade or a profession—except when the government educates men for its own service, or a State with a similar purpose educates its own teachers—or the higher culture which a university offers, is a matter of individual concern. Any citizen may have what he will pay for for himself or his children, but he should not expect the community to pay for anything more than what all alike require. There is nothing in our theory of government that justifies such a thing, and certainly there is nothing in our experience to encourage the further "development" of the public school system in the direction in which it has been developed in recent years.

On the same day the following reply was written and sent to the editor of *The Times*. It was published a few days later.

OUR SCHOOLS NOT SO WEAK.

To the Editor of *The Times*:

My attention has been called to an editorial in today's *Times* entitled "The Weakness of our Schools," and permit me to say that I think the facts in the case will hardly warrant either the premises or the conclusion of that article. It is true that the literary requirements for admission to West Point are not high, and, I presume, it is a fact that at the examination held last June out of one hundred and sixteen nominees only fifty-eight were admitted. But I object first to the assumption that all the rejected nominees received their preliminary education in the public schools; and, second, to the inference that, even if they had attended the public schools, these schools are to any great extent responsible for their failure to pass the West Point examination. Upon investigation it will be found that many of the young men nominated to West Point come from private schools, and that a larger proportion of this class of applicants fail to pass an examination than of the class that come from public schools. In addition, it should be stated that many are rejected on account of some physical defect or weakness. But the main cause of the rejection of so many young men who attend the West Point examinations is the vicious system by which they are selected. They are nominated in the main by members of Congress, and the great majority of them still continue to use this power in order to pay political debts or to secure political favors.

The fathers of talented young men are not apt to furnish the most useful help to aspiring politicians, and hence their sons are apt to be passed by and the honor of an appointment to West Point given to some weak, stupid fellow, who, of course, is rejected. I venture to say that the average ability of the young men who attend the examinations at West Point is less than that of the young men of the same age who attend any college, academy or high school in the country. No wonder so many are rejected. But the fault is not in the public schools, the branches taught in these schools, or in their development of late years.

The editorial in question states that some of the nominees were selected by competitive examination. Is the writer informed as to how many of these were rejected? So far as Pennsylvania is concerned I never heard of a single one being rejected who was selected in this way, and I am glad to say that quite a number of our Congressmen have adopted the plan. If all will do so and give the boys in our public schools a chance we will soon silence any man who makes the mistake of concluding that our schools are weak because the nominees to West Point fail to pass the examinations.

Will you allow me space to enforce what I have said by an example? Some fifteen years ago I received a note from Thaddeus Stevens inviting me to call at his office when convenient. I did so within a few days, and as I entered he abruptly addressed me in words like these: "Have we no brains born now-a-days in Lancaster county? I have sent some half-a-dozen boys to West Point. Some were rejected and others failed before they got half through. And now I want to try the plan of competitive examination. Will you help me?" The matter was quickly arranged, and Mr. Stevens had the satisfaction of seeing his first nominee under this plan graduate fourteenth in his class and he was elected immediately after graduation assistant professor of

mathematics in the institution, his second graduated sixth and is now professor of the French language and literature at his *alma mater*, and William M. Black, nominated by Mr. Stevens' successor in the same way, graduated *at the head* of a large class at the last commencement. The nominees to the Naval School at Annapolis have done almost equally well. Not a single nominee to either school from this Congressional district has been rejected in the last fifteen years, except one who was nominated by Mr. O. J. Dickey on the old plan. And let me add that all of the nominees received their preliminary education in the public schools. Our boys have brains and our public schools can develop them, but we want a fair chance.

J. P. WICKERSHAM.

WHAT SHALL BE DONE?

THE New York *Times*, in a recent article, after showing that many thousands of poor children are excluded from the public schools for want of room, goes on to say that one of three things must be done; first, allow things to remain as they are with these thousands of children growing up in ignorance, which is dangerous and not to be thought of; second, to increase the taxes for school purposes which will well-nigh bankrupt the people; or third, cut down the expenses of the High and Normal Schools and other institutions in which the higher branches are taught and use the money thus saved in teaching poor children to read and write. This alternative, the writer of the article thinks, is bad enough, but preferable to either of the others.

Stopping only to say that if the City of New York had not been badly governed, robbed, it would have been abundantly able to give a good education to all its children, we present the following paragraphs from *The Times* article, giving its views in its own words:

The fact of so large a number of children of the laboring classes being prevented from attending school by absolute want of room in the buildings is a very serious one, and should receive instant attention from the board. The growth of an ignorant population in our poorest wards is in the highest degree perilous to the city's future, and is discreditable to the administration of our popular education. The difficulties, however, before the Board of Education are obvious. They are restricted in their annual allowance by the Board of Apportionment, and have in fact not sufficient revenue for all their branches. Their application for next year is, indeed, a far larger sum (about $4,000,000) than they have hitherto received. But it is doubtful if even that would permit any great increase of school accommodation, so long as all their departments are kept up in their present condition.

There is only one course for them. They have, in fact, to choose between schooling the poor and the rich. They can cut down the outlays for the Free College, the Normal College, and such schools as the Twelfth-street school, and easily find a surplus with which to pay for teaching the poor children of "Mackerelville" and "Cow Bay." It is, of course, hard for teachers to shut out the clean, well-dressed, and wealthy children, and receive the untidy and poor pupils. Of themselves, the teachers will never do it. It can only be done by the higher authorities. But it is obviously the duty of the board, if it only have a certain sum to expend, to educate the ignorant and needy and neglected, rather than the children of the fortunate. A great number of families who send their children to such schools as the Twelfth-street school, where a girl can be trained in all the higher branches of study, could perfectly well afford to send them to private schools. Why should the public tax itself to teach Latin and science to a wealthy gentleman's child, when it cannot afford a place wherein to teach A B C to the child of the rag-picker?

It is not, of course, practicable to exclude any children from the ward schools, because of their dress or appearance, and especially because of the superior neatness of their appearance. But the same result can be obtained in another way. Let the board cut down the grade of their best schools. Let them dispense with Latin and all advanced studies, and open more primary classes. This would break up the classes in more elegant or learned studies, and send the children to private seminaries. The money saved in such instruction could be immediately applied to primary instruction in the poorer wards. Even if buildings were not at hand, the board could hire rooms, and begin humbly but thoroughly at its legitimate work. The same reasoning may apply to the large sums appropriated to the Free College. We believe that, under certain circumstances, a community has the right to tax itself in order to furnish advanced education to such of the needy classes as require it. But is New York in such a condition as to justify this? And is it expedient to neglect the education of the masses for the sake of the few?

WOMEN TO THE FRONT.

THE University of Pennsylvania has taken a new departure as unexpected as it is gratifying. It has determined to open its doors to female students, and has made public announcement to that effect. The Philadelphia *Telegraph* thus alludes to the matter:

This action being an experiment it is natural that the way should be prudently felt in the first instance; we therefore find the Trustees deciding to confine the course which may be pursutd by young men and women in common at present to certain studies whose pursuit may be supposed to be most profitable under such an arrangement. There can be no complaint on this score, neither can there be any doubt if the plan succeeds—that is to say, if females avail themselves of this exceptional opportunity—that the entire University course will eventually be made as open to women as to men. For the coming term the studies which persons of both sexes may pursue in the Department of Arts and the Towne Scientific School are, General and Analytical Chemistry, Physics (including Mechanics, Light and Heat), and History. Women are

to receive the same instruction, at the same time, on the subjects named, as the young men. Thus another great move is made in the equalization of social force and responsibility, and we believe its success cannot be doubted. Harvard and other colleges have already done this justice to women, but our University is sufficiently prompt to entitle it to rank with the pioneers in the reform. The decision is of a kind with the intelligent course taken in the reconstruction of the methods of the Medical Department, and the double action places the University at the very front of the progressive educational influences of the time. That young woman of brains and ambition will make the very most of this chance we have no question; proofs of such willingness have not been wanting, and the comparatively recent victory of women in the medical schools gives the best encouragement that before many college terms women everywhere will have the same intellectual opportunities as those enjoyed by men—as they should have under every rule of reason, fairness, and common sense.

The *Ledger* commends the new movement in the following thoughtful editorial:

The University of Michigan and Cornell University in New York, together with several lesser colleges, ranging from Antioch and Oberlin in Ohio, to Swarthmore in our own State, have tested the question of the co-education of the sexes with results satisfactory to themselves. Some of these are residence colleges, but, in the Michigan University at Ann Arbor, the students choose their own homes, and the families of some of the foremost citizens have been open to them in order that the experiment might be tried under favorable conditions. The Sage College at Cornell was built expressly for the residence of women students, while in its dining hall are the University commons, to which an added decorum and refinement is brought by the presence of the sex that rules in etiquette.

But it has been for a long time a just complaint by those Philadelphia parents who desired to give their daughters higher education than the best schools here supply, that while their sons need but cross Chestnut street bridge to profit by the magnificent advantages of the University of Pennsylvania, they must banish their daughters to the exile of Vassar and Wellesley Colleges for women, or to Ithaca and Ann Arbor for the broader privileges of the University training. This need the University of Pennsylvania meets in the current announcement of the Board of Trustees. It has quietly tried the experiment already on a small scale. Some women students who worked in Professor Genth's laboratory last winter acquitted themselves well, their work comparing favorably with those of the boys, and their presence proving to be by no means a disturbing element—rather a regulating one in fact. The University classes in Harmony and the Science of Music, in the afternoons, for two years, have been attended by both men and women students. Thus the "making haste slowly" of the old institution has proven the wisdom of the step.

It was a natural consequence growing out of the fact that the monasteries were the first educators and refuges of scholars, and that they offered an asylum for learning through the years of the barbarous rule of the strong hand in the dark ages of violence, that the early foundations of English universities should be more or less monastic in character. The robe is still maintained, and upon the acceptance of those foundations for permanent scholarships known as fellowships, the requirement of celibacy is imposed. A married student in Oxford University to-day is only permitted to reside with his wife by virtue of a fiction which makes her the proprietor of a licensed boarding house—as Oxford undergraduates must either live within the University precincts, or in certain licensed boarding houses over which the Faculty have control. But while the monastic rule is outgrown in other respects, and the simplicity of a scholar's life is invaded by the extravagances and luxuries appertaining to the fast set in college, the value of the cloister is lost, and the fact that young men and women do meet, without its walls, in the scientific and literary lecture-rooms of both Cambridges, in Massachusetts and in England, is letting in considerable daylight upon the discussion of college questions.

The so-called Harvard examinations for women are the grudging gift of that University in answer to the many applications by Massachusetts girls for a share in her benefits. As has been said, she gives the girls but half a loaf, and expects them to furnish their own yeast and flour. They are simply examinations held in Cambridge, New York and Cincinnati, by a tutor, who gives a certificate of proficiency, which is all very well as far as it goes. How far it goes may be briefly stated. Except for the languages, the examination for admission to the Girls' Normal School in Philadelphia is more advanced, and the examinations of Swarthmore College afford a far higher test of scholarship. The certificate, as may be supposed, has nothing whatever to do with the conditions of admittance to the University that grants it. When the University of Pennsylvania shall offer examinations for women students it will be upon the privileges and preparative study to which they have been admitted. It does not take its last step first nor offer a premium for a roof before it has laid the foundation.

Let it be added that what this old, conservative, Philadelphia University can do may be safely followed by every other university and college in the state. There must be care exercised in adopting such a radical change, but with wise management such a plan may be everywhere a success. Thirty years ago, when we first publicly advocated the co-education of the sexes, we found few to agree with us. Our college men were to a man against it. And now, what do we see? The world *does* move!

THE TRAMP.

THE question of getting rid of tramps, is one that not only sorely puzzles the newspapers, but occupies the serious attention of statesmen and philosophers. The evil has a cause and can only be removed by the removal of that cause. To arrest and confine every tramp now on his wanderings through the country, would be only to secure present relief; unless the root of the evil be destroyed, crop after crop of these worse than nuisances will spring up, until

all the prisons, penitentiaries and workhouses in the country cannot contain them. The following editorial from the *National Teachers' Monthly*, points out in our view the only remedy for the pest that will prove effectual. It may be slow in its operations, and it will cost money; but if applied as a comprehensive system it will cure the evil. Let provision be made for the proper education and training of all idle, vicious, friendless, vagrant children, and the tramp nuisance will come to an end. The editor of *The Monthly* says:

That tramps are nuisances, hard to manage and repress, no one doubts. We have interviewed several, and conversed with others who have interviewed many more, and our conclusion is that they consist, mainly, of three classes—discouraged and half-crazy people; those who are a little better than idiots, whose greatest sins are incapacity and laziness; and knaves, robbers and prison birds. They are nuisances, all, without fixed habitation, home, or visible means of support. Irrepressible philanthropists try to reform them, benevolent old ladies feed them, dogs bark at them, constables and the police arrest them, and the public generally say, "Push on." They doubtless die and are buried, but we never heard of a clergyman attending their funerals. They are simply unmitigated nuisances. We shall never have less of them until we have less of the ignorance, idiocy, insanity, and wickedness that produces them; but to-day we are culturing, to a certain extent, everywhere, especially at the South and in our cities, all of these pestiferous elements. They are noxious weeds, increasing by their own morbid force.

But there are tramps, who will not "move on." They are leeches, fastening themselves on the vitals of society, sucking the life-blood out of it, producing loathsome and festering sores that cannot be healed. These stay-at-home nuisances are worse than the moving ones, for they sustain low groggeries, and gambling hells, making the lives of their families a burden, taxes high, and property unsafe. They are the repeaters at elections, crowds in mobs, and the scum and filth of community generally. Life is unsafe, in the outskirts of our larger cities, on their account, for they commit burglaries and often murder, insult females, steal children and pass counterfeit money. If such persons increase in the future, as during fifteen years past, it will be necessary to have a mounted police on the outskirts of all our cities and towns. We admit, this is a sorry picture, but, if it is the truth, no one should refuse to look on it. If we do not devise some means for the suppression of this burden it will suppress our peace and safety.

Education of their children is the remedy. Take them away from their vile associations while in infancy and let them breathe the pure atmosphere of a good asylum and, if possible, a good home. By some mysterious permission of providence, to the lowest are awarded a multitude of children, but under no plea of humanity, or personal freedom, should they be permitted to keep them, and make them like themselves. Wickedness is a disease, taken by contact rather than transmitted by ordinary generation. Now if the state cannot conquer her enemies, she will be conquered by them. It is a question of superior force. If downright stupidity and wickedness is permitted to increase, we may soon say farewell to a republican government. It is not cruel to take away the rights of a few, in order to save the lives and liberties of the many. Let us reconstruct the children of tramps and get rid of their parents as soon as possible.

LOCK HAVEN NORMAL SCHOOL.

THE official papers concerning the recognition of the school at Lock Haven as a State Normal School were published in the [illegible] number of *The Journal*. We now present below the minutes of the commission as prepared by the secretary, which had not then come into our hands. We also append an historical sketch of the school and a brief description of the buildings. We notice that the history of the school is defective in omitting any mention of the early interest taken in the project by Hon. George O. Deise, a member of the Legislature in 1869–70, now deceased, and of the addresses delivered by the State Superintendent in favor of establishing the school as early as 1870.

THE MINUTES.

LOCK HAVEN, PA., Sept. 14, 1877.

Pursuant to announcement, the Commission authorized to report the advisability of recognizing the Central Normal School at Lock Haven, as one of the State Normal Schools of Pennsylvania, met in the office of the Principal, and upon motion of Hon. J. P. Wickersham, Ex-Gov. Bigler, of Clearfield, was elected Chairman, and N. H. Schenck, of Cameron county, Secretary. The entire Commission consisting of Hon. J. P. Wickersham, Ex-Gov. Bigler, of Clearfield; Hon. C. R. Early, of Ridgway; Gen. James A. Beaver, Bellefonte; C. B. Gould, Esq., of the Cameron County *Press*; with the following superintendents of schools in the eighth normal school district: George R. Dixon, of Elk; J. W. Allen, of Potter; J. A. Gregory, of Clearfield; H. Myer, of Centre: N. H. Schenck, of Cameron; M. W. Herr, of Clinton, and John A. Robb, of Lock Haven. The President of the Board of Trustees, announced that the Principal, Prof. Albert N. Raub, would take great pleasure in showing the Commission the building and grounds. After a thorough inspection of these an adjournment was had for dinner. After dinner the commission and trustees again assembled in the office, when Hon. J. P. Wickersham presented the application of the trustees for recognition. Hon. L. A. Mackey, President of the Board, made some remarks relative to the title of the grounds and building. S. D. Ball, Esq., Secretary of the Board, then presented the financial statement with some other papers of the association. The trustees having retired the commission proceeded to consider the work assigned them. The Secretary was instruced to read the constitution of the association. After a careful examination of the plans, titles, expenses, etc., Dr. Wickersham read a resolution recognizing the school, and on motion of General James A. Beaver it was unanimously adopted. [This resolution was pub-

lished among the official papers in the last number of *The Journal*.—ED.]

While the commission was in session the chapel was completely filled with persons from the city and country. When the commission had completed its labors, the trustees accompanied its members to the platform, and the audience was called to order by Hon. L. A. Mackey, followed with prayer by Rev. Joseph Nesbitt. Mr. Mackey stated the object of the meeting and then introduced Dr. J. P. Wickersham who was greeted with applause. The doctor read the decision of the commission, made a few remarks, introduced Ex-Gov. Bigler, and took his seat. Gov. Bigler, briefly but neatly, recited the history of the public schools of this state. He was followed by Gen. Beaver, Dr. Early, C. B. Goulden, the County Superintendent, Prof. A. N. Raub, and Hon. S. R. Peale, A vote of thanks was tendered the commission, after which Dr. Wickersham was again called out and spoke with his usual earnestness and eloquence. The exercises were interspersed with choice music. Throughout, the exercises were exceedingly interesting, and all who participated in them expressed themselves highly pleased. N. H. SCHENCK,

Secretary.

THE HISTORY.

We condense the following from Maynard's "Historical View of Clinton County:" Of all who, a few years ago were interested in the pressing educational question, no one, probably gave more time and labor towards its solution than the Rev. G. W. Shinn, from 1866 to 1870, Rector of St. Paul's Church, Lock Haven. He was a frequent, though unofficial visitor of the public and private schools of Lock Haven, encouraging and assisting teachers by his sympathy and suggestions; lecturing to classes on various subjects, and even in some instances voluntarily taking charge of special branches. Being a cultivated gentleman of very fine scholarship, his work in the schools was valuable to the pupils, but his own experience there served to deepen his sense of the need of something better. It was natural that he should discuss, with all who were likely to be interested, a matter which he had so much at heart, and it was in the course of such a discussion with Prof. A. N. Raub that the latter suggested the idea of making Lock Haven the site of the school for the 8th Normal School District. Mr. Raub was at that time Principal of the Lock Haven High School, and through his position, and by reason of his own educational attainments, was also well aware of, and strongly impressed with, the defects of our present school system, and the want of higher opportunities. Being a graduate himself of a State Normal School, he knew all the advantages to the community of those schools, and was able to speak as by authority of their practical workings. It is hardly necessary to say that Mr. Shinn received the suggestion, not merely with satisfaction, but with enthusiasm, and from that time he and Prof. Raub worked together—and worked hard too—to evolve a State Normal School for Lock Haven, out of such elements as could be found here.

One of the requirements of the act of the Legislature regarding Normal Schools is, "an area of ground of not less than ten acres in one tract;" and this naturally became one of the first matters for the consideration of the two gentlemen who were sitting on this Normal School egg, and it is not surprising, at least to those who knew Mr. Philip M. Price, that very early in the history of this institution, the minds of Mr. Shinn and Mr. Raub turned in this direction, not only in regard to the land question, but also in the whole matter.

The question of the land was hardly distinctly stated by the self-appointed committees which waited upon him, before the assurance was given that any ten acres of land belonging to him were at the service of a State Normal School. To appreciate the generosity of this offer, it must be remembered that Mr. Price's land was all in the city limits, and much of it worth at that time, $1200 per acre. The sixteen acres which were finally presented by him would have brought at least $500 per acre. The foundations of the scheme being thus satisfactorily laid, it was worked up rapidly. Money being now the next important consideration, arrangements were at once made for getting subscriptions, and at this point Hon. L. A. Mackey, always public-spirited and liberal, stepped to the front. He gave the subscription paper a good start by heading it with the sum of $1000, and with this impulse it went forward with such spirit that after a very short time the friends of the project found that organization was now not only possible but necessary. A meeting of the subscribers was therefore called, and articles of association under the corporate title of "The Central Normal School Association of the State of Pennsylvania," were adopted; these articles and application for incorporation were filed December 22d, 1869, in the Prothonotary's office, and finally on the 14th day of February, 1870, it was declared and decreed by the Court "that the persons so associated under said articles shall become and be a corporation or body politic in law." By the articles of association, a Board of Trustees was named, to serve until an election should be held by the stockholders. At a meeting held February 17th, 1870, the subscription lists were reported, and it was found that they footed up about $29,000, and it was decided that as soon as the sum should reach $35,000, work on the building should be commenced. At this meeting, also Hon. L. A. Mackey was elected President of the Board of Trustees, and he has held that position ever since. It was determined that inasmuch as the Central Normal School was better located and more liberally supplied in the matter of land, than any other in the State, so it should in every respect be a model Normal School, and at least up to the standard fixed by the Act of Assembly. In the late autumn of 1871, the walls being sufficiently advanced to give a clear idea of the ground plan, it was thought advisable to invite the State Superintendent, Dr. J. P. Wickersham, to visit Lock Haven, and examine the location and plans of the new Normal School. That gentleman came accordingly, and in the words of the Secretary, who reported at the meeting of the Board, December 3d, 1872; "Dr. Wickersham said that he highly approved of both plans and location, and that in his opinion our grounds are the best adapted to the purpose for which they were to be used, of any so used in the State, and he cheerfully gave his certificate for the first installment of $5,000, of the appropriation from the State Treasury."

Work progressed steadily from that time, but the formal laying of the corner-stone did not take place until the 4th of July, 1873. The ceremonies were of a brilliant and impressive character, and were participated in by almost all who had been the friends of the enterprise from the beginning. Of the original Board of Trustees, only Mr. Price and Judge Parsons were absent on that day. They had both

gone to their rest. There could not have been selected a more favorable location for a school building in the West Branch valley than the one chosen for the site of the Normal School. To say nothing of the elevated position it occupies, from which a fine view of one of the grandest scenes imaginable may be had, the healthfulness of the location commends it to all who have sons and daughters to educate. The formation of the ground immediately surrounding the building is such as to clothe the place with pleasing and romantic interest. There is a picturesqueness in the scenery round about that gives that peculiar charm and attractiveness to the location which is so highly appreciated and admired by the students of nature. Taken altogether the Central Normal School is one of the most complete and best fitted for all its objects of any of the schools in the State; while, with its splendid endowment of land, it has room for growth and improvements to any extent. Its friends claim for it, that it ought to be, and will become, in time, the great educational institution of Central Pennsylvania, and through it Lock Haven will become the educational centre of a vast territory, not merely for the purpose of training teachers, but offering advanced education in all departments.

The Board of Trustees, as at present constituted, consists of Hon. L. A. Mackey, President; S. D. Ball, Esq., Secretary; Prof. A. N. Raub, A. H. Best, Rev. Jos. Nesbit, Robert E. Cook, Samuel Christ, G. Kintzing, Col. A. C. Noyes, John S. Furst, Dr. J. H. Barton, Hon. J. W. Smith, Jacob Brown, W. W. Rankin and Wilson Kissler, with Thomas Yardley as Treasurer.

A successful preliminary summer term of the school was opened in the city high school building, May 14th, with the following faculty: Principal and Professor of theory and Practice of Teaching, A. N. Raub, A. M.; Professor of Mathematics, John A. Robb, A. M.; Professor of Drawing, Penmanship and Book-keeping, M. W. Herr; Professor of English Language and Literature, I. A. Harvey, A. B.; Teacher of Geography and History, Miss Agnes Reilly; Teacher of Reading and Elocution, Miss Dora E. Merrill, M. E.

DESCRIPTION OF THE BUILDINGS.

The front of the building, so broken by several recesses and projections as to give variety and relief even when seen from a distance, faces due east, and is 176 feet in length. The whole depth of the centre, including Price Hall, which is in the extreme west of the building, is 131 feet. The depth of each of the two wings, north and south, is 87 feet, while that of the arms connecting the centre and the wings is 48 feet. In height, the main building consists of basement, four stories and Mansard attic; the wings, of the basement, three stories and Mansard attic. To the the level of the first floor the material of the wall is dressed stone; the stories above the basement are of brick; the Mansard attic is slated on the slope and tinned on the top. The cupola is in the centre of the front, and is 38 feet high from roof line, on a base of 17 feet square. The whole height of the main building from floor of basement to top of cupola is about 105 feet, commanding from the top a magnificent view, which extends into Centre county on the one hand, and Lycoming on the other.

The interior of the building is arranged as follows: The basement contains a large, cheerful dining room, a roomy kitchen with laundry adjoining, and various rooms for steward, butler, matron and servants—all well lighted and ventilated, and conveniently arranged for the household purposes of the 300 persons who may be domiciled there.

The first floor is devoted entirely to the school-work of the establishment. Here are the Principal's school room and office, recitation rooms, parlor for visitors; also preceptor's parlor, office, library, museum, laboratory and class rooms. The second floor is arranged for music parlor and study rooms. On each end of the corridor on this floor are a bath room and water closets. The floor of the hall is level with the second floor, having stairs from the first floor, entrance from the second floor, and entrance to the galleries from the third floor. The hall is 23 feet in height, and large enough to seat 1,000 adults comfortably, with space at the west end for lecturer's platform, etc. The stories above the second floor, including the Mansard attic, are all much alike, and are appropriated to sleeping apartments, with some study rooms, linen closets, etc.

MINNESOTA TEXT-BOOK SCHEME.

THE State of Minnesota last winter adopted a scheme of securing State uniformity of text-books. The scheme was almost precisely similar to that defeated by the House of Representatives of this State some two or three years ago. Its deserved failure is forcibly announced in the following editorial from the *Educational Weekly:*

The Minnesota text-book scheme, concocted by one Ignatius Donnelly, and passed by a pliant legislature, without so much as one manly and honest protest from Mr. Superintendent Burt, has come to grief. Conceived in iniquity, brought forth in sin, and nursed in stupidity, its demise could not be otherwise than inglorious. The "contractor" has made herculean efforts to put the scheme in operation. He has dickered with publishers, bargained with obscure authors, and made frantic appeals for orders. But the orders do not appear to gladden his heart. The distinguished educators constituting the commission seem to have agonized over the problem of selection without any very brilliant result. In numerous cases the county commissioners, by whom most of the superintendents are appointed, have instructed the latter to disregard the law, while in some localities contracts for books, at greatly reduced rates, have been made directly with the leading publishing houses. The result is just what was foreseen and predicted by men of sense, that school-book matters are in dire confusion, many of the schools are unsettled by reason of the conflict of authority and opinion, and great injury has been inflicted upon the cause of education in the State.

At the State Teachers' Association, whose annual meeting was held in Mankato during the last week in August, the school-book law was a leading topic of discussion. An elaborate report was made against it. The contractor was present, and was allowed freely to ventilate his views on the gravity of the situation. Correspondents on the ground inform us that during the debate upon the subject, words were hurled back and forth among the disputants like hot brick-bats. A series of resolutions was at length

adopted, with but one dissenting voice, condemning the measure, pronouncing it subversive of the laws of trade, sumptuary in its character, and impracticable in its execution. The resolutions close with a request to the next legislature to repeal the act and reimburse the contractor for whatever losses equity may seem to justify. These resolutions may be taken as the deliberate expression of the intelligence of the state upon the merits of the case, and coupled with the pronounced opposition of boards of education and the adverse action of some of the county commissioners, will undoubtedly influence the legislature to repeal an act which is a disgrace to the statute books of the commonwealth.

And thus, signally and ignominiously, fails the second attempt of Minnesota to saddle "uniformity" upon the people. It is to be hoped, in the interest of education, that she will now learn wisdom through the teachings of a second dearly bought experience. It is to be hoped that even her legislators will begin to comprehend that statutory law can never repeal the laws of social and political economy, nor take from the people the inalienable right of private judgment in the management of affairs preëminently their own. It is to be hoped that the people themselves will, through their sad experience of the frailties of the average legislator, learn to discriminate between sound and sense, between ignorance and sterling honesty and intelligence, between arrant demagogism and true statesmanship. As the illustrious reformer and author of this astutely concocted scheme has, after a conspiciously disreputable public career, retired to the shades of private life, the people should inscribe high on the lintel of his door, *requiescat in pace* forever more.

The utter collapse of this Utopian scheme, in a state which will be henceforth known in history, we fear, as the champion school-book reformer, together with the overwhelming defeat of similar measures in Wisconsin and other States, may be taken as indications of the decline of a mania for text-book uniformity under the specious plea of economy, that has prevailed throughout the country for several years past. As we have before intimated, Minnesota might have been spared the humiliation of her present position had her State Superintendent possessed the moral courage and energy requisite in such a responsible position. The fearless and manly stand taken by the Wisconsin Superintendent, reinforced as he was by the unanimous support of the educators of the State, illustrates what might have been accomplished in Minnesota had she not been burdened by a weak and timid leader at the head of her school system. When men are devoted to such positions, they are expected to become the guardians of the great public interests committed to their charge, rather than of their own personal popularity while in the midst of unreasonable and unreasoning clamors.

This is a painful subject to dwell upon, but as an advocate of sound principles in educational administration, *The Weekly* would be false to its trust did it shrink from the task of exposing the weaknesses of the system without regard to personal considerations. Educators for educational offices, true statesmanship in school legislation, men of nerve, men of power, men of honesty and self-sacrifice, rather than place-hunters and self-seekers for educational leaders! These alone will give us true success. These alone will defeat school-book abominations and preserve and build up a school system worthy of a great State and adequate to meet the demands of a great republic.

SOME NOTES FROM ERIE.

IN the correspondence columns of the *Boston Commonwealth* we find the following racy sketch of last summer's trip to Erie, and what was done there. It is from the facile pen of Miss L. E. Patridge, and is alive with the sparkle of wit and the good-natured wisdom for which the lady is noted among her friends. "Patti" is as much in her element in journalism as upon the platform, and her work in both directions is deservedly at a premium. Though late, we commend the letter to our readers:

Nothing less potent than the stern demand of duty could have induced your correspondent to leave her quiet home at such a sleepy hour, forego the dear delights of private life for a time, and take the midnight train for Erie, to attend the State Teachers' Association. Very interesting must the meeting be which could compensate for this trip to the uttermost parts of Pennsylvania earth, in midsummer weather, with the memory of the strike so freshly in mind. But it did pay for all. Even the dreaded night traveling was not so bad, thanks to the man who invented sleeping-cars! For, after making my toilet with due regard to the fact that in these striking and accidental times the railway traveler is kept in inconvenient uncertainty as to whether his or her next appearance in public shall be in their customary *role*, or as a mangled corpse, and after so arranging my belongings that, should I wake up in the morning and find myself dead, the inheritors of my vast possessions should lose nothing, I stretched the tired limbs and laid the head as if upon my own accustomed bed. The rushing of the train as it swept through the darkness brought in the fresh, cool air through the open window, as well as the cinders; while the roar of the engine and the swaying of the cars were soothing as soon as I got over the impression that it was necessary to hold my breath every time we crossed a switch, to prevent us from running off the track; or that I must spring to the opposite side of my berth to preserve the balance of the car, whenever it gave an unusual hitch. But sleep did not come. How could it, when imagination was busy, and before the closed eyes there came up a vision of the starless night, the long train freighted with human souls, the narrow track stretching away before us, and the tremendous, unreasoning power dragging us resistlessly wherever it led; whether winding around the dizzy edges of precipices, darting through dangerous tunnels, bridging frightful chasms, or shooting straight as the bird flies across the open country; only guided and controlled by one man, upon whose faithfulness and skill the lives of all those helpless passengers depended. The thought was terrifying; but out of terror came reason, and with one wild, desperate clutch I caught at self-control, looked my fear straight in the face for a little, and then with the words, "If it be now, 'tis not to come; if it be not to come, it will be now; if it be not now, yet it will come; the readiness is all," I turned and slept serenely.

Dreams ended with the dawn, but not so the journey. All day long we traveled on. Through agricultural counties where the tasseled corn waved in

the wind, blossoming buckwheat whitened the ground, thrifty tobacco flourished, and cabbage patches throve. Through forlorn mining towns, with long rows of smutty tenement-houses, and forlorn inhabitants, smutty, too. Through dreary oil regions, where deserted wells and tumble-down shanties told of ruined hopes and broken fortunes. Stopping now-and-then at some little wayside station, where a group of village loafers stared curiously at the train, and little barefooted boys and girls, with cheeks of tan, glanced up at us shyly from under torn straw hats and limp pink sunbonnets. Sometimes we caught a sudden glimpse of deep wooded ravines, shadowy sylvan solitudes, which set us longing; sometimes we came upon a river, winding through a mountain-gap; and sometimes we passed a forest fire, blazing fiercely under the noonday sun, as it eat its way into the hearts of the grand old trees, or crept stealthily along the trunks and reached out greedily toward the tender branches; but generally it smouldered sullenly in the underbrush, sending up vast volumes of smoke which made the sunshine hazy, lingered among the treetops in the valley as if loth to rise, and then hung in lovely mist-wreaths on the far-off mountain tops. But there were some burnt districts, over which the merciless flames had swept, shriveling every green thing growing there, and left the hillside bare, but for the blackened stumps, a few charred logs, and now and then a tall scarred skeleton tree lifting its leafless arm to heaven as if in mute protestation against such desolation; while all the time the mountains rose before us, closed around us and glided past us as we swept on; and all the way the graceful golden-rod, the vivid-tinted cardinal flower, the purple aster, the russet tufts of the water-flag, and the reddening berries of the sumac, told that the summer days were almost gone.

At last, just as the sun went down in golden glory between the distant trees, we caught a glimpse of intense blue—the waters of the lake—and knew we were at Erie. Then came greeting smiles, hearty hand-shakes and welcoming words (for there is much good fellowship among the Pennsylvania teachers), after which we were promptly packed into the Reed House coaches and whirled away up into the heart of the city. Then followed more greetings from those who had arrived before us—a great demand for rooms, some scarcity of call-boys, and much hunting for stray baggage. After a little settling—a supper, and a night's rest—we were ready to associate, and we began right away. We didn't wait for President Maris, though he was prompt to the minute; no; we began it ourselves, even if the newspapers didn't say so, and we had associated considerably before the opening. Then came Superintendent Jones' cordial address, welcoming us to this city by the lake, all of which we thoroughly enjoyed, though what we most appreciated was the fact that we couldn't discover which the speaker was most proud of—the city of Erie, or the State Teachers' Association; though we felt pretty sure it was the latter, and that he refrained from saying so out of politeness. Our chairman's reply was good, of course; for didn't he represent us? And didn't he tell them that intellectual light, no less than physical, travels from east to west? To be sure! And we all felt like "burning and shining lights" directly, and voted it mentally a most excellent address. The next thing on the programme was the President's inaugural address. It was an able paper upon the "Public School System." Professor Maris took high ground, and treated the subject broadly and fairly. While acknowledging the good work done under our present organization, he felt that it stopped too soon, and urged the establishment of a system in Pennsylvania similar to that of Michigan, where the child entering the primary school can look forward to passing through all the intermediate grades successfully, and graduate, finally, at the State University. And this, the speaker argued, the State could well afford to do because of the pressing need to elevate and educate the masses, as well as the great value of intelligent and cultivated citizens. It seemed a striking coincidence that Dr. Apple's paper upon the "Relations of Colleges to Common Schools" should follow directly, not alone in actual order, but in thought as well; for so it did. In the address of Prof. Maris, the worker and teacher in the common schools was stepping up and reaching out toward the college, while in Dr. Apple's paper the college professor stepped down and reached out toward the common schools; and so the hands met in friendly fashion, and for once the two fraternized—for which happy consummation all honor is due to the President of Franklin and Marshall College, Dr. Thomas G. Apple.

The finest essay of the three days' meeting was unquestionably that of Dr. S. P. May, of the Educational Department of Toronto, Canada, upon "Pedagogical Museums." It was better than learned—it was practical; for the lecturer not only described Great Britain's splendid museum at South Kensington, with whose display at the Centennial we are all somewhat familiar, but he showed us how every institution of learning, from the little backwoods schoolhouse to the city university, could, and should, have its collection of interesting, curious and beautiful things. Such a paper must needs have left many valuable suggestions with every live educator present; and who was there of us who will not long, from that time forward, to be of that favored band of excursionisis who will go with so good and great a teacher as Dr. May to Paris in 1878? Progress meets its enemies everywhere, and the Pennsylvania teachers prove no exception to the rule; for even among them there are some who walk always with the head turned over the shoulder to see how it "used to be" done—some who are ever sighing for "the good old days." The discussion of Prof. Sensenig's paper upon the "Teaching of Mental and Written Arithmetic" brought out the conservatives with their old war-cry of "Utopian!" in full force. Unfortunately the writer was not present to defend his views (Miss Leonard having read it to the Association); consequently no action was taken upon the matter. Superintendent Curtis's ideas concerning the "Teacher's Tenure of Office" were well and wittily put. He showed up the hardships of the teacher's desultory life, and plead for a change in this respect, and brought on quite a spirited argument among the members of the Association as to the why and wherefore; all agreeing that it was an evil, and should be remedied. The only extemporaneous lecture of the whole three days was that of Dr. Hays, of Washington College, and it received by far the most appreciative attention. No one who has ever watched an audience can doubt that off-hand speaking is much more effective than written essays; for what a speaker gains in elegance of diction and concentration of thought by writing, is lost for want of that force and magnetism which only comes when the thought springs fresh from the speaker's brain, clothed in the words which come at the moment they are

spoken. That talk on County Institutes will be remembered long after the substance of the written papers has faded from the minds of those who heard them read—and it was worth remembering, too! Practical, pertinent and well put were his ideas upon the subject; and the humorous allusions which sent some bright thought home, and the keen, laughing satire aimed at old-fogy notions, were skillfully managed. It was pleasant, too, to hear him speak of Prof. F. A. Allen as he did, bearing witness to a little of the much good work that veteran in the ranks has done.

The education of the German element, which is one of the hard problems which Pennsylvania has to solve, was sensibly and suggestively handled by Superintendent Baer, of Berks county. He counseled moderation and tact in the treatment of this matter, and apparently spoke whereof he knew. Of the "Teacher's Personal Culture," Professor Caughey, of Lafayette College, treated thoughtfully and eloquently. One sentence I must quote: "If we are satisfied simply to creep about humbly among the children, the nascent men and women, the future capitalists, professional men and politicians, and all who are to toil and labor in whatever business or calling; yes, and among the possible gamblers, thieves and murderers of the future, too; and to teach them a little grammar, a modicum of science and Latin and history, and nothing that takes hold immediately and positively of character, of the vital forces of moral and intellectual life, we certainly have attained but a low and unworthy apprehension of our function and responsibilities as teachers. Our proper duties towards our pupils in instructing them in those branches of knowledge which they must understand in order to qualify them for business and professional life we, of course, must perform faithfully, and with all the ability we possess. But after all what is the worth of a knowledge of geology, or Greek, or geometry, towards the making of a man, or a good citizen, if there is a want of truth and honest principle in the heart, and an unchecked development of all the vile passions of our nature?" From this you will catch the tenor of the essay, and see how fine it was.

But one of the speakers announced on the programme failed, and that one was, I am grieved to say, a woman, Mrs. Superintendent Rickoff, of Cleveland, Ohio, who was to discuss the "Cultivation of the Imagination." A telegram came upon the appointed day merely stating that it was impossible for the lady to be present. It was a disappointment to some of us, at least; for we were glad to see a feminine's name upon the programme, and sorry that it should prove to be but a name. Not that women did not take part, for they spoke often and freely; and it was a delightful thing to rise, if the spirit moved, and say your say, not in the midst of that appalling hush which we can well remember used to come upon the Association whenever a woman's voice was heard in its deliberations, but to feel, instead, that pleased attention which helps every speaker both to thoughts and words. Miss Lloyd, of Bucks county, not only took part in the discussions, from time to time, but for half a session took the chair, being Vice President, and probably sat where none of her sex ever sat before, upon the judges' bench. She presided with self-possession, dignity and decision, and proved her fitness for the position by filling it ably. Miss Leonard, of the Indiana Normal School, was on the Committee on Resolutions, and seemed to be pretty much all there was of it, when the time came for their report, but she was equal to the occasion, and in her easy, lady-like manner made good the deficiencies of her fellow-members.

So the days went by, filled to the brim with profit and pleasure, and for the most of us the pleasure came last; though it was a little hard to sit through a discussion in which one felt no special interest and hear the locusts singing outside, and see the mountain-ash tree with its bright berries beckon invitingly through the open windows, and think how fair the restless waters of the bay lay sparkling in the sunshine, near at hand, while just beyond lay the lovely lake covered with dancing white-caps. Some yielded to the temptation—the naughty boys and girls—and slipped off for a row or sail; but in due time even the "goody-goody" ones had a chance, and then what a procession of pedagogues filed gaily down to the little wharf! Of that trip down the bay, and out on the lake, I will not stop to tell; neither shall I give you any idea of the wit and wisdom then and there let loose, nor of the shouts of laughter that went up when the jokes were perpetrated, for I couldn't if I tried; and I wouldn't think of mentioning that party who went off by themselves, and, like Captain Kydd, "they sailed and they sailed;" but, if they didn't show the best of good taste in so doing, as Glory McQuirk would say, "they got their come-uppance;" for we found them becalmed just within the bay, and very glad to be taken in tow by the rejected tug and dragged back into the harbor.

Who was there? First, our good State Superintendent Wickersham, a little grayer, perhaps, for the centennial year brought many extra tasks which he was too faithful to shirk, but still erect and soldierly in bearing, and just as ready as ever to flash out his words of fire if the Keystone State or her common schools were assailed. And Prof. Allen, now principal of the State Normal School at Mansfield; but he gave us fewer of his bright speeches and good suggestions than usual. Miss Lewis, the only woman superintendent in Pennsylvania, was with us, too; reserved in manner, but perfectly self-possessed, she spoke only when called upon. Besides these there were present Rev. M. B. Kerr, the founder of the association, who must have been very proud of this thought of his; and Mr. Pyott, the reporter, who must be wise perforce; for hasn't he sat and gobbled silently association after association for I don't know how long?

It is over! Our boyish-looking president, our genial chairman, our bright, particular star, our leader (of course his name was Hays, for we were a loyal lot), with his policy, all the thinking men and women who made the association a success, are scattered, and Erie knows us no more! But we know Erie; yes, indeed! we learned all about it. Let me impart my new-found knowledge—Erie is a place of several inhabitants, mostly men and women with a sprinkling of children. It contains a court-house, a post-office, the "Reed House," a public square, and a high school, whose vice-principal is a woman; also a picnic scow, a steam-tug and a bay. The principal family is named Jones, and it is very proud, very hospitable, very cordial, and, as a Boston girl would say, "very nice!" One more thing: I know that the coat-of-arms of the State of Pennsylvania contains two horses very much rampant, for I've had the pleasure of staring at them for three days; and I know that the length of the aforesaid commonwealth is twenty hours in a palace-car! After that the name of the head-girl in the geography class must surely be

PATTI.

OFFICIAL DEPARTMENT.

DEPARTMENT PUBLIC INSTRUCTION,
HARRISBURG, November, 1877.

A. A. DINSMORE, Esq. has been appointed County Superintendent of Monroe county in place of B. F. Morey, Esq., resigned. His post-office address is Stroudsburg.

DISTRIBUTION OF APPROPRIATION TO NORMAL SCHOOLS.

HARRISBURG, October 2, 1877.

To the Boards of Trustees of the State Normal Schools:

GENTLEMEN: Below you will find a statement concerning the distribution of the money appropriated to the several State Normal Schools with the accompanying conditions. As you will see, the next step in the matter is the acceptance of these conditions on your part. This should be done by the passage by your boards of a resolution to that effect, which, signed by the President and Secretary, should be transmitted to this Department. One-half of the $100,000 will then become payable, and one-half of the $75,000 after the first of January next. The balance will be paid when evidence is presented that the conditions imposed have been complied with.

Forms of mortgages will be forwarded from this Department at an early day, to be filled up and executed.

J. P. WICKERSHAM,
Supt. Public Instruction.

STATEMENT OF THE COMMISSION.

HARRISBURG, September 29, 1877.

The undersigned, directed by the Legislature to distribute the money appropriated to the several State Normal schools, by the acts of 1877, have agreed to apportion the amounts as follows:

Of the $100,000, $30,000 is given to the school at Indiana, $25,000 to the school at Shippensburg, $20,000 to the school at California, $15,000 to the school at Mansfield, and $10,000 to the school at Bloomsburg.

Of the $75,000, $10,000 is given to each of the schools at Millersville, Edinboro', Kutztown, West Chester, and Lock Haven; and $5,000 to each of the schools at Indiana, Shippensburg, California, Mansfield and Bloomsburg.

The money to be payable subject to the provisions of said acts, by warrants on the State Treasurer, issued by the Superintendent of Public Instruction—one-half when the authorities of the several schools, in a legal and binding manner, agree to comply with the conditions of such distribution hereunto appended; and the other half when satisfactory evidence is presented, showing that said conditions have been in good faith complied with.

The following are the conditions upon a compliance with which the sums of money above named will be paid to the several State Normal Schools:

1. That mortgages, as heretofore, in favor of the State, be executed upon the property of each of the several schools, to the amount of the sums herein assigned it.

2. That the schools at Indiana, Shippensburg, California, Mansfield, Bloomsburg, and Lock Haven be required to devote the several amounts herein appropriated to them to the payment of their present indebtedness, and that for this purpose the friends of said schools be required to add to these sums twenty per cent. of their amount from private sources, subscriptions or releases of creditors.

2. That the schools at Millersville, Edinboro', Kutztown, and West Chester be required to make such additions to their buildings, grounds, or appliances, or to take such measures looking to the bettering of their condition, or to the increasing of their efficiency as may be prescribed by the Superintendent of Public Instruction and approved by this Commission.

4. That in case any school shall decline to accept these conditions, the money it would otherwise receive shall be divided equally among the remaining schools.

The undersigned in this connection also desire to state:

1. That in assigning the bulk of the money appropriated by the Legislature to the schools most deeply in debt, they have conformed to what they knew to be the intention of the Legislature.

2. That any further increase of the debt of a State Normal School, either by an accumulation of interest or by expenses incurred without money to pay them, will tend to weaken the whole work of normal instruction in the State, and should be carefully avoided. The income of each should, if possible, be made to meet its expenditures. [Signed.]

J. F. HARTRANFT, *Governor of Pennsylvania.*
GEORGE LEAR, *Attorney General.*
J. P. WICKERSHAM, *Supt. Public Instruction.*

TEACHERS' COUNTY INSTITUTES.

THE annual sessions of the Teachers' Institute in the several counties of the State, will be held at times and places as announced below:

Mercer	Mercer	Nov. 5
Lawrence	New Castle	" 5
Lancaster	Lancaster	" 12
Delaware	Media	" 12
Juniata	Mifflintown	" 12
Franklin	Chambersburg	" 19
Cumberland	Carlisle	" 19
Wayne	Honesdale	" 20
Carbon	Mauch Chunk	" 26
Dauphin	Dauphin, Nov. 27	Halifax, Dec. 18
Adams	Gettysburg	Dec. 3
Lebanon	Lebanon	" 4
Fulton	McConnellsburg	" 10
Elk	St. Mary's	" 17
Luzerne	Wilkesbarre	" 17
Schuylkill	———	" 17
Huntingdon	Huntingdon	" 17
Beaver	Beaver	" 24
Columbia	Bloomsburg	" 24
Jefferson	Brookville	" 24
Mifflin	Lewistown	" 24
Armstrong	Kittanning	" 24
Blair	Hollidaysburg	" 24
Cambria	Johnstown	" 24
Centre	Bellefonte	" 25
Greene	Waynesburg	" 26
Northampton	———	" 26
Somerset	———	" 31
Westmoreland	Greensburg	" 31

BEETHOVEN, born at Bonn, 1770, was equally great in his intellect and his affections. How deep and tender was that noble heart those know who have read his letters to his abandoned nephew whom he commits so earnestly to "God's holy keeping." There is no stain upon his life. His integrity spotless, his purity unblemished, his generosity boundless, his affections deep and lasting, his piety simple and sincere. "To-day happens to be Sunday," he writes to a friend in the most unaffected way, "so I will quote you something from the Bible: "See that ye love one another." Beethoven was not only severely moral and deeply religious, but he has this further claim to the admiration and respect of the musical world, that his ideal of art was the highest, and that he was true to his ideal, utterly and disinterestedly true to the end.—*Haweis.*

HOME, HOME, CAN I FORGET THEE?

GERMAN MELODY.

Andante.

1. Home, home, can I for - get thee, Dear, dear, dearly loved home? No, no, still I re-
2. Home, home, why did I leave thee? Dear, dear friends, do not mourn. Home, home, once more re-

gret thee, Tho' I may far from thee roam.
ceive me, Quickly to thee I'll re- turn.
} Home, home, home, home, dearest and happiest home.

THERE IS A HAPPY LAND.

HINDOO MELODY.

1. There is a hap - py land, Far, far a - way, Where saints in
2. Bright in that hap - py land, Beams ev' - ry eye; Kept by a
3. Come to that hap - py land, Come, come a - way, Why will ye

glo - ry stand, Bright, bright as day; Oh, how they sweet - ly sing,
Fa - ther's hand, Love can - not die. Oh, then, to glo - ry run;
doubt-ing stand, Why still de - lay? Oh, we shall hap - py be,

Wor - thy is our Saviour King, Loud let his prais - es ring, Praise, praise for aye!
Be a crown] and kingdom won, And bright a - bove the sun, We'll reign for aye!
When from sin and sor - row free, Lord, we shall live with Thee, Blest, blest for aye!

HAVE WE A STANDARD OF THE ENGLISH LANGUAGE?

IN most matters pertaining to human intercourse, and in regard to which man has frequent occasion to communicate with his fellows, there has always been felt the desirableness—well-nigh an imperative necessity—of a rule or measure, established by authority, or so fixed by usage as to have become generally acknowledged, and to which appeal may be made in doubtful or disputed cases. Thus, among Christian nations, the Bible is recognized as an infallible guide in morals and religion. Gold, with civilized countries, is the established standard of commercial values. So of measures of weight and dimensions: what perplexities and annoyances would be saved, and how much the general convenience promoted by the universal adoption of the metric system.

In the foregoing and other instances how great the advantage, and almost absolute need, of a fixed rule or measure by which all doubtful questions in that special department can be decided. Is there scarcely less need of such a recognized authority in a given language? Without it what ambiguity as to the mean ing words of what diversity of usage in orthography and pronunciation? Have we anything approximating to such an authority and guide? In France, a learned body, the French Academy, sanctioned, if not appointed by the State, determines usage in such matters, and its decisions have the force of established law. In this country and Great Britian, from the different character of our civil institutions, and the changing nature of the language itself, and other causes, no such body exists, nor if exisitng would its authority probably be conceded. The alternative seems to be, a prevailing or general acquiescence in some leading lexicographical authority. Have we such an authority?

And, *first* and as most important, in regard to the *meaning* or *Definition* of words. Hon. HORACE MANN, who was one the leading educators of the country, and a gentleman of high culture and intelligence, said, "So far as I know there is an unanimity of opinion that Dr. Webster's is the best *defining* Dictionary in the English language;" and the present Chief Justice of the United Slates wrote under date "*Washington, D. C., October 25th*, 1875. The book has become indispensable to every student of the English language. A law library is not complete without it, and the courts look to it as of the highest authority in all questions of definition.—MORRISON R. WAITE.'" It would be easy to multiply similar expressions, and from equally distinguished sources, in Great Britain and the United States, Indeed, public decision on this point seems well-nigh unvarying and unquestioned.

Second, *Orthography*, or the proper spelling of words. That what is known as Dr. Webster's system of orthography, as now presented in his works, *is* generally accepted as the standard of usage in the United States, is shown by the following facts: (*a*) By definite statements, over their own signatures, obtained from between one and two hundred prominent book-sellers all over the country, in 1873–4, it appears that the sales of Webster's Dictionaries were as 20 to 1 of those of any other English lexicographer, and this proportion is believed yet to continue. (*b*) More than *ten million* copies of school books are annually published in the United States adopting Webster as their general authority. (*c*) The periodical and miscellaneous issues of the American press are in the same direction. (*d*) More than *fifty millions* of Webster's Speller have been sold in this country, and it has yet a regular demand.

That this condition of things *will continue* seems evident, (*a*) from the intrinsic reasonableness of the system; *e. g.*, the French words *chambre, cidre, entre*, in conformity with their English pronunciation, have become *chamber, cider, enter*. Shall the few remaining words of the class continue to present the anomaly of the old *i. e.* the French, orthography? Why spell *metre* a measure, with *tre*, but *diameter* a measure across, *ter*? (*b*) As Professor Goodrich has well said, "The tendencies of our language (in orthography) are to greater simplicity and broader analogies," and this tendency is in no wise likely to be reversed, but the demand, as indicated by public gatherings of learned men for this very object, and in both hemispheres, is for further progress in the same direction.

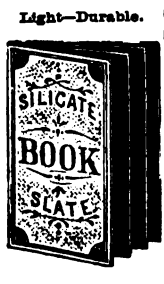
It should be added, that where present good usage sanctions two forms of spelling the same word, Webster's Dictionaries now give both—the preferred one first. The same rule is applied in pronunciation.

Third, *Pronunciation*. Pronunciation is "the act of uttering with articulation," and its organ is the human voice; its law, the prevailing, best usage of cultivated and refined people. It can, of course, be taught perfectly only by living example, and any mode of presentingiton printed page, either by respelling, or a system of diacritical marks, must from the nature of the case be an imperfect one. Then there will be diversities of usage and occasional changes; yet some general guide, having the weight of authority, and presented on the printed page, seems indispensable. Hardly any one thing so publicly marks and distinguishes the unrefined and uncultivated from the refined and cultivated as inaccurate and inelegant pronunciation. A person of quite average intelligence, soon after the appearance of that work, stepped into a bookstore and inquired for "*Gui-sot' on Civilisation.*" The bookseller inquired of the clerk, "Have we a copy of Gee-zo'?" The inquirer's entire ignorance of French pronunciation was of course made apparent to him, and occasioned a blush of mortification. Yet he might well have been pardoned a want of knowledge of French; but how would it have been had the blunder been English? Does Webster furnish a satisfactory guide and authority in this particular? President PORTER, the editor of the last edition of Webster's Unabriged, says of its "Principles of Pronunciation, originally prepared by Professor Goodrich, and elaborated by Mr. Wheeler with suggestions from able scholars," that "a more thoroughly practical and satisfactory treatment of the subject, the editor confidently believes, cannot be found in the language." The principles thus thoroughly and carefully elaborated, in their application to each individual word, have also had taken into account, as the final law, the best usage of both hemispheres, *the result of wide observation, correspondence, and a comparison with the labors of leading current English lexicographers.* The claim of Webster as high authority in this respect the public have fully recognized. The importance of a satisfactory guide on this point is obvious. How common the error of All'o-path-y, Hy'dro-path'y, instead of Al-lop'a-thy, Hydrop'-a-thy, in accordance with Ho-me-op'a-thy?

Is not the claim well established, then, that Webster is the standard authority of the English language, if any English Dictionary can be so regarded? or, as Professor Stowe has said, "The standard, wherever the English language is spoken, it deserves to be, must be, is, and will be. If we would have uniformity, we must adopt Webster, for he cannot be displaced; but others may be."—*Educational Reporter.*

Acknowledgments.—Since our last list, orders have been received as follows: From County Superintendents D. H. E. La Ross, 228 names; Aaron Sheeley, 50; A. F. Silveus, 45; B. F. Shaub, 45; G. W. Bartch, 24; Jno. H. Stephens, 23; N. R. Thompson, 20; Wm. B. Bodenhorn, 17; Jas. C. Graham, 13; J. O. Knauss, 8; also from Messrs. J. R. Bair, J. W. Allen, Silas Wright, E. H. Laubach, R. Q. Warnock, Samuel McVay, S. H. Prather, D. C. McHenry, M. B. Vosburg, J. E. Ross, W. H. Sloan, David Eshbach, D. B. Dykens, Edward Fink, S. H. Eby, J. S. Waltz, A. M. Carey, John Kirby, J. N. Smith, C. W. Pierson, Jos. H. Timmon, Godfrey Saurmet, Alex. Elliott, Z. T. Bartleson, B. S. Gordner, J. W. Lang, T. C. Martin, J. M. Mills, Chas. B. Weaver, C. P. Calhoun, Levi Streeper, Joseph Slack, Henry Moul, J. B. White, C. Buck, D. S. Robinson, A. S. Stayer, Wm. Fair, J. J. W. Schwartz, Geo. P. Griffith, Jos. R. Weber, Labanah Townsen, Jas. R. Zellers, H. M. Freed, Christian Worley, George Blain, Stephen Hill, J. R. McCurley, W. H. McConnaughey, W. C. Ramsey, Geo. D. Alderfer, D. F. Barton, J. B. Eshleman, Jno. E. Roberts, Wm. Silver, Val. D. Urich, Robt. J. Wall, Wm. Evans, A. S. Jamison, J. N. Beistle, W. James, J. M. McKee, O. P. Morrow, A. P. Barney, Jno. Rising, I. W. Hoffman, Jno. Duggan, Benj. M. Barr, Jno. I. Cox, D. B. Brunner, Jno. F. Fernan, Geo. B. Adams, P. J. Connaghan, Jno. S. Sell, S. D. Jennings, W. B. Stevens, Thos. J. Burchinal, G. W. Brink, D. Sutliff, D. O. Donovan, John Bresh, F. L. Shollenberger, Henry Bradley, J. Gifford, D. C. Larrabee, James P. Coburn, John E. Keim, J. R. Lockhart, Minnie Dipper, A. B. Campbell, J. H. Gibbony, W. C. Tilden, Jason P. Davis, H. L. Bollman, W. S. Lytle, W. W. Woodruff, Jno. R. Jordan, H. G. Neff, David A. Jones, Wm. Healy, J. O. Knauss, Jno. Brubaker, Thos. Sipes, J. S Morris, H. L. Donaldson, W. Brower, A. V. Gerauld, D. McKee, Jas. G. McSparran, S. B. Thompson, R. S. Walk, Chas. H. Brelsford, R. A. Townsend, V. G. Curtis, Samuel Heron, Ida A. Shuler, B. Angelo, James Heilman, A. C. Tate, Wm. Lansbury, A. G. Dollenmayer, Wm. L. Pyle, Maggie Eckbert, D. E. Kast, J. N. Moore, Saml. Gross, Jonas B. Erb, Jno. D. Rutherford, Jos. Smith, C. W. Benney, Adela Wasson, Luke Eger, Julius Berry, Geo. Cheeseman, Jacob Howland, R. R. Eschleman, C. D. Clarke, Mary E. Colcord, C. A. Bailey, J. P. Thomas, J. H. Leedom, E. T. Burgan, J. P. Wilson, C. C. V. Crawford, B. C. McGrew, Samuel Wolf, J. H. Monks, R. W. McKee, Robert Danton, W. H. Sherm, M. Stiles, C. A. Kehen, Jonathan Shafer, Wm. R. Boyle, J. M. Conroy, D. F. Stone, J. C. McFeeters, D. D. Jones, G. P. Peddicord, J. S. Calvert, James Silliman, Thos. Perry, M. P. Sentman, J. H. Reed, Philip Bausman, David Reid, E. C. Wagner, Patrick Scott, Jno. Pryor, Jos. K. Lukens, I. M. Kester, Benjamin Franklin, S. B. McIlvain, F. S. Barnes, J. G. Mitchell, H. McEvoy, D. O'Connor, Jos. C. Taylor, W. B. Baker, C. McHugh, W. A. Lindsey, D. D. Phillips, Chas. M. Carter, Chas. Young, J. C. Prather, Wm. Lutz, I. H. Hutchison, Jno. Landeys, Wm. Guiles, Chas. R. King, J. S. Gallagher, N. P. Hyndman, W. D. Miller, D. A. Long, J. R. Shafer, D. Hough, W. H. Curtis, H. N. Howell, J. H. Weld, Nathan Garret, Mary Peck, Jas. M. Gelwix, Jas. F. Long, A. E. Gehman, Geo. W. Reeder, Jos. Clifford, Asa Wilcox, D. Dinsmoor, Elias Leaman, W. J. Schrock, C. M. Myers, J. B. Gilfillan, E. B. Pursel, Owen R. Wilt, A. C Leonard, O. L. Simpson, W. A. B. Little, A. J. Buffington, Moses Bonsall, T. O. Hollis, J. R. McNary, G. A. Blose, Nathan Gibble, H. S. Danner, W. S. Hammond, J. F. McKnight, D. M. Porter, L. DeCoursey, Wm. E. Naile, Patrick Campion, S. S. Newton, W. A. Kerr, Geo. F. Rothrock, Anna Guenthes, F. H. Uniholtz, J. G. Kinsey, S. P. Childs, J. T. Taylor, A. H. Roffe & Co., Jno. C. Myers, J. A. Crawford, A. M. Ward, R. S. Storm, John E. Bright, G. D. Lichty, Samuel Mier, Elias Leaman, Wm. T. Irwin, L. T. Hensel, D. B. Rowlee, F. M. Katz, H. S. Mohler, F. W. Rhoads, J. T. Gillespie, James McKissick, A. P. Supplee, J. M. McMains, T. B. Miller, W. H. Henkle, S. H. Prather, C. W. Hance, Geo. W. Bittle, R. B. Daniels, C. L. Squires, J. T. Bauer, R. F. Hoffecker, J. E. Piollet, Mary P. Copper, S. S. Forney, L. E. Patridge, Noble Meredith, D. B. Lain, R. M. McNeal, T. C. Waite and others. *The Journal* list in some counties is low. Shall we not have a good return from the Institute sessions now holding throughout the State?

Light—Durable.



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No. 6—1877.

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There's Music in the Air.	There is a Happy Land.
Farewell to the Woods.	Longing for Spring.
Robinson Crusoe.	Blue Bells of Scotland.
Sing, Gaily Sing.	The King of Love.
Nearer, My God, to Thee.	Sun of My Soul.
How Gentle God's Commands.	O Paradise! O Paradise!
Home, Home, Can I Forget Thee?	The Alpine Horn.
	Deck the Hall with Boughs of Holly.

When the Swallows Homeward Fly.

School Songs and Hymns—(Words).—Meek and Lowly; Christmas Time is Come Again; River, River, Little River; Up the Hills in Early Morn; Father William; I Would Not Live Alway; Lead, Kindly Light; Follow Me, Full of Glee; When the Mists Have Rolled Away; Upidee; All Together; Freedom's Flag; Sweet By-and-By; Ho, Ho, Vacation Days; Where, Oh Where, are the Visions of Morning? Far Away; Saviour and Friend; Who is He in Yonder Stall? Work for the Night is Coming; Jolly Old St. Nicholas; Sweet Hour of Prayer.

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The Hymns given are "Nearer, My God, to Thee;" neither the words of which by Mrs. Adams nor the music by Dr. Mason can ever be sung too much or too widely; "Sun of My Soul," Keble's tender evening hymn to the well-known air by W. H. Monk, of England; "How Gentle God's Commands," and "Heirs of Unending Life," both to Nageli's grand melody ("Dennis") of which a celebrated English Bishop has said, "They will sing it in Heaven!" "The King of Love," and "O Paradise" are choice hymns and striking airs that will be new to most public school teachers. In addition to these with music, Twenty-one favorite Songs and Hymns (the words only) are also given. The new Supplement (No. 6) thus makes, altogether, a collection of music which is of choice excellence, well adapted to the use intended; which is thrown together in convenient form, and is furnished at a very low price for Institutes and Schools. Costing but a trifle—little more than a nominal price—the pupils can readily be induced to contribute toward its purchase with the prospect of securing new music for their school.

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THE
SCHOOL JOURNAL
ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

Vol. 26. DECEMBER, 1877. No. 6.

STATUS OF PRIMARY EDUCATION IN FRANCE.

PEDAGOGICS ABROAD.—NO. IV.

CHAS. H. HARDING.

THE great crying evil in France is the lack of education among the poorer classes, who nevertheless, by the democratic constitution of their country, are called upon, together with the rich and the middle classes, to take their share in the government. This evil is recognized in France, and each fresh assembly meets at Versailles with the determination of having primary schools built, and of having every child taught at least to read and write. But these good intentions are terribly hampered by the all-absorbing military appropriations, which, swallowing up some 500,000,000 francs annually, do not allow the ministers and deputies, well disposed as they are, to appropriate to the education of all France a sum much exceeding that expended by the single State of Pennsylvania in the same cause. Still, the acknowledgment of the existence of the evil is in itself a great step toward remedying it, and the France of to day is making progress in this respect. Before the last war, instead of saying with Terence,

Homo sum; humani nihil a me alienum puto,

the French citizen might rather have cried, "I am a *Frenchman*, and that which is not French is foreign to me." A salutary reaction has set in since the war, and nothing is more common than to hear Frenchmen observe that their country was conquered not by Moltke or Krupp, but rather by the German *Schullehrer*.

We shall not enter into the merits of the long-standing dispute in France as to the superiority of secular or of clerical education. The parable of the mote and the beam might probably be applicable to both parties, but no impartial observer can fail to recognize that the triumph of Romanism in France, consequent upon the Revocation of the Edict of Nantes, has formed one of the chief obstacles to the development of public education in that country. Huss, Luther, Calvin—in a word, all the leaders of the Reformation—inculcated the sacred duty devolving upon every man of reading the Bible for himself in his own tongue. Hence we now find education far more advanced in Protestant than in Catholic countries—a fact which has not a little contributed to the decadence of the Latin races. Richelieu, who held that a hungry people was the most submissive, was also of opinion that an ignorant people obeyed the most readily. Louis XIV. and Louis XV., without saying as much, acted up to the cardinal's maxim, doing absolutely nothing for popular education. The instruction of the upper classes was at that time in the hands of religious societies or *congrègations*. The Revolution, displaying its usual iconoclastic zeal, upset this system, without reflecting

for a moment that it might be as well to substitute some other system for it, and that it takes time to organize a body of teachers fit to undertake such a work. The Convention decreed that those parents should be punished who did not send their children to school, overlooking the fact that there were no schools to send them to. It proclaimed gratuitous instruction, but made no provision for the salaries of the teachers. These hastily instituted reforms were eminently characteristic of the feverish excitement amidst which matters affecting the most serious interests of the nation were disposed of. The First Empire and the Restoration saw but little done on behalf of primary education. Under Louis Phillippe the question of gratuitous instruction and compulsory attendance got no farther, not withstanding the fact of such men being in power as Victor Cousin, Villemain and Guizot.

The efforts of Jules Simon and Barthélemy Saint-Hilaire to have the question settled by the Republican government in 1848 proved futile. Napoleon III., having found 44,000 schools in France at the commencement of his reign, left it with 54,000 at its close—a most insignificant rate of increase, as regards primary instruction, compared with the advances made in the same direction by foreign nations, and with the material progress of France itself during those eighteen eventful years. The Third Republic has, as was observed above, given to the question of education a prominent place among the reforms to be instituted. Scarcely had the most pressing financial and military questions been dealt with ere a searching examination into the educational system of the country was undertaken and its defects laid bare. In a report on primary and secondary education in different countries, read by M. Levasseur before the Academy of Moral and Political Sciences on the 29th of May, 1875, he establishes the fact that out of forty-five nations whose educational statistics he had examined, France only occupies the twentieth place—naturally a somewhat humiliating admission for a nation which has claimed to be the centre and radiating point of modern civilization.

The map on which the departments figure, tinged with black proportionately with the illiteracy of their inhabitants, is in mourning to a most lamentable extent. It might be taken for the geological map of Pennsylvania, with the coal regions indicated by black patches; and most assuredly the Lehigh Valley would appear not any darker on such a map than does on the chart of ignorance the unfortunate department of the Ariége, with sixty-six per cent. of its inhabitants absolutely illiterate. Happily, since this map was issued, matters have somewhat mended; nevertheless, the lack of appreciation of the benefits of education is still very noticeable in a large number of the departments.

The village schools are kept up by the communes, aided by contributions from the department and from the government. The total annual amount of the contributions from these three sources does not exceed 65,000,000 francs for the whole of France. Deduct from this paltry sum of $13,000,000 a certain quota for the construction and keeping in repair of school-houses, and it will at once be seen that what remains to be divided among the 54,000 teachers is scarcely sufficient to afford them even the barest subsistence. The recent reduction of school teachers' salaries throughout the United States has given rise to much unfavorable comment, but happy, indeed, would teachers in France consider themselves were they to receive even anything approaching the reduced pay of their Transatlantic brethren. Of the school teachers above spoken of, 26,000 receive 750 francs ($150) per annum, 14,000 receive 550 francs, and 10,000 but 450 francs, or less than the common farm laborer, who has at least food and lodging provided for him by his master. True it is that many of the teachers receive a slight additional salary for acting as secretary at the *mairie;* but a much larger number of them have to eke out a scanty subsistence by manual labor during certain hours of the day, especially in harvest time.

As for the school houses, they are usually in such a dilapidated condition that the farmers would scarcely care to use them as cattle-sheds. We have visited schools—and they exist by the score, not to say by the hundred—without either benches or desks, blackboard or maps, and through the roofs of which the rain poured on teachers and pupils. On entering one of these schools and seeing the little fellows in their torn blouses, their feet simply encased in great wooden sabots, their lunch-baskets with coarse bread and a few nuts by their side, the stranger can hardly realize that he is in that country where there is a more even distribution of property, and where the peasantry are more prosperous and conservative than anywhere else. Among the efforts

made to improve things may be mentioned the frequent inspections, not only by government inspectors, but also by gentlemen called *délégnés cantonaux*, who are usually chosen from among the landed proprietary of the neighborhood by the prefects.

"Paris is not France," is a remark frequently uttered by French conservatives, and one which certainly holds good as regards education. The department of the Seine actually expends some $6,000,000 annually on education, which is something over 46 per cent. of the total expenditure for all France under this head. Considering that the population of the department of the Seine does not exceed 2,400,000, it will be seen that the expenditure there for educational purposes is not inferior to that of our own representative States. At the Vienna Exhibition of 1873, it may be recollected that Paris, conjointly with Saxony and Sweden, was awarded the diploma of honor for primary instruction. This branch of education is absolutely gratuitous, and, in view of the experience of other countries, is likely to remain so, in spite of the outcry that parents able to contribute toward the education of their offspring should be compelled to do so. Ink, paper, pens, books, models and maps are supplied free of charge to each pupil. During 1876, not less than 330,000 books, 1,490,000 copy-books, and 1,440,000 steel pens were thus supplied in the primary schools of the capital. In Paris there are some 260,000 children of both sexes old enough to go to school. Of this number, 104,000 get some kind of education, either at home or at the boarding schools, and 134,000 attend the public school—either under secular or clerical management—and the *salles d'asile*, of which we shall presently speak. The great capital thus contains some 22,000 children who cannot read or write, and this will account for the fact of the educational status of the department of the Seine being inferior to that of many of the eastern departments, and occupying a far lower place on the list than might otherwise have been expected. Up to the age of two years the infants of parents too poor to watch over their offspring in the daytime are admitted into the *creches*. In these admirable private institutions—founded some thirty years ago by M. Marbeau—the infants are washed, fed and tended with maternal solicitude. Between the ages of two and six years the children are admitted into the *salles d' asile*, or children's homes, of which there are over a hundred in Paris. There it is first sought to develop the child's intellectual faculties, prepare it for school, inculcate habits of cleanliness and morality, and instruct it in the rudiments of reading and writing. Between the ages of six and fourteen children are admitted into the schools, and, nominally at least, go through the plan of study drawn up by the board of primary education, and which is as follows: Reading, writing, geography, spelling, arithmetic, compendium of sacred and French history, linear drawing, singing, the rudiments of physics, geometry, and natural history, and calligraphy. Were this programme carried out in its integrity, education in France would, it need hardly be said, be considerably further advanced than it is at present. Even in Paris, however, the material obstacles are not slight. Most of the schools are far too cramped for space, especially in those wealthy and crowded parts of the city between the Rue de Rivoli and the Boulevards, for instance, where every foot of ground and every breathing-space are worth large sums of money. In a city where the people are so closely packed, and where a family is content to live on a flat, how is room to be found for spacious, airy school-buildings, with a detached seat and desk for each pupil, a large central hall and a play-ground adjoining? Such establishments must inevitably cost immense sums of money, but Paris, if we may judge by the annual increase in the educational appropriations, seems determined not to let this difficulty stand in the way of her children obtaining a good education.

A word as to the teachers. The female lay teachers are, it must be acknowledged, very greatly inferior to the lady teachers in the United States. It is said that in England when a man has failed at everything else he becomes a coal merchant. We should not dream of applying this remark to French ladies as regards school-teaching. At the same time it is an established fact that the French girls' schools which are managed by nuns, and especially those of the Sisters of St. Vincent de Paul, are above the other female educational establishments. Most of the male lay teachers are appointed from the primary normal schools which exist in the chief town of every department; and it is a noteworthy fact that the majority of them are ardent Republicans, notwithstanding the fact that during the Empire every effort was made to win them over to the imperial side. In every normal and

primary school was the bust of Napoleon, and a liberal distribution took place of the famous *Journal des Instituteurs*, every paragraph of which, political or educational, was dressed up in Napoleonic attire. Possibly, some of the lay-primary school-teachers may have adopted republicanism out of a spirit of natural opposition to their old adversaries and competitors, the *instituteurs congreganistes*. Of these, too, a word must be said. While in the secondary clerical schools most of the instructors are Jesuits, in the primary schools most of the teachers belong to the confraternity of the *Ecole Chretienne*, the members of which, without taking the vows and assuming a lifelong engagement, agree, nevertheless, to remain single, to submit to the discipline of the society and to wear the ecclesiastical dress. Strict Ultramontanists, these brethren have been somewhat unjustly nicknamed the *freres Ignorantins*. Living as they do in common, with but few wants, and receiving, whenever they require it, pecuniary aid from the wealthy party to which they belong, they are satisfied with a rate of pay less than one-half that of the lay teachers, and are thus preferred in a large number of communes on the simple ground of economy. Their plan of instruction is the same as that adopted in the secular primary schools, except that religious instruction and exercises of course play a larger part with them than with their lay brethren. The ultra radicals who, in a large measure, control the educational appropriations in the town-council, are bitterly opposed to any portion of the public instruction remaining in the hands of the clerical element, and their most strenuous efforts are used to have all these *congregational* schools of both sexes closed. They would concentrate the entire national educational system under the control of a body of lay teachers, to be paid by the towns and by the state. In these views they are supported by the Republican party, while the clergy have on their side the majority of the Senate. Whether the absence of clerical competition would be likely to prove advantageous or not to the secular educational establishments, we shall not attempt to say, but certain it is that the long continuance of this bitter feud between the two parties has been anything but conducive to the educational progress of France.

At the age of fourteen the Parisian youth, not intended for one of the learned professions, leaves school to learn a trade. Should he desire to increase his stock of knowledge and have a taste for study, he can, after passing an examination, enter the excellent Ecole Turgot, wherein the programme of the primary schools is somewhat extended, without, however, embracing the study of Latin and Greek. At the Turgot the course comprises mathematics, linear and ornamental drawing, physics and mechanics, chemistry, natural history, calligraphy, book-keeping, French language and literature, history, geography, English and German. All the pupils are day scholars. There could probably be no better devised programme for developing and exercising the intellectual faculties of those who have gone through the primary schools, and it may unhesitatingly be affirmed that for most of the pupils the training received at the Ecole Turgot is of lifelong value.

If a youth aim yet higher, he can apply for admittance at the College Chaptal, where he may eventually obtain gratuitously a classical education, and at its close a University degree From the Chaptal school —the new building devoted to which forms a conspicuous feature on the Boulevard de-Batignolles—the pupil may, on passing an examination, enter either of the two higher colleges, the Central or the Polytechnic. Then, too, the Conservatoire des Arts et Metiers may be looked on in the light of a magnificent annex to the schools of primary instruction. The idea of such an institution originated with the celebrated mechanician of the last century, Vaucanson, who bequeathed to the government his splendid collection of models, drawings, tools, machines and automatons. The Convention decreed the establishment of the Conservatoire, which now contains some 12,000 models in its industrial museum. Among them may be mentioned Pascal's arithmetical machine, Lavoisier's instruments, the first highway locomotive constructed by Cugniot in 1770, a lock forged by Louis XVI., clocks and watches of historic interest, and those patents which have run out by lapse of time. The machinery is set in motion at certain hours of the day, during which the public is admitted free. The library, rich in works of science, art and industry, is always open. In the evening there are gratuitous lectures delivered by men of science on such subjects as geometry, mechanics and chemistry applied to the arts, industrial and agricultural chemistry, agriculture, spinning-looms, dyeing, etc. The Conservatoire turns out the best foremen and heads of work shops to be found

in Paris. It occupies the fine old building once used as the abbey of St. Martin des Champs, which has been tastefully restored in the original style, and takes up one of the sides of a handsome square laid out with flowers and fountains.

Nor must we pass over entirely unnoticed the admirable gratuitous lectures given by the Polytechnic Association—*not* the Polytechnic School—on such subjects as hygiene, linear drawing, French grammar, book-keeping and geometry. These lectures are held in some twenty different buildings, so as to be within the reach of the working classes, no matter what part of Paris they may reside in. Among the lecturers in recent years are to be found such names as those of Ferdinand de Lesseps, Isidore Geoffroy Saint-Hilaire, Barrel and Batbie.

We have thus rapidly seen what Paris does for her poor youth. The city has often been called the focus of light and the centre of intelligence. Without going quite so far as this, it must, nevertheless, be acknowledged that with her public schools, her splendid libraries, her museums, her natural history and art collections, and her very numerous and valuable institutions open free to all, Paris affords unusual facilities for boys, taken even from the lowest strata of society, to rise by dint of hard study, a firm will and exemplary conduct to the very highest positions.—*Lippincott's Magazine.*

FREE TEXT-BOOKS.*

IN the plan of free text-books has been found, and is to be found, freedom from all the enumerated and some unenumerated ills. Books purchased and furnished by the school authorities, as seats, black-boards, crayons, erasers, stoves, maps, globes, etc., are furnished, must at once of necessity result in local uniformity, in a full and prompt supply to all pupils, in rendering impossible any unauthorized changes by teachers, and in that minimum cost which always and only comes through wholesale purchases directly from producers' hands.

Free books, moreover, add materially to school attendance by removing from poverty a barrier no less discouraging or insuperable than was the rate-bill of former days. In this matter, abundant experience is in harmony with the plain deductions of theory. In the light of this experience it may be unhesitatingly said that if no other result were in view, free books would find their justification *in this alone.*

The charity of districts is a poor substitute for the common bounty, bestowed alike on rich and poor, and comprehending all the necessary cost of actual school instruction.

It is difficult, nay, it is impossible, to see why, in a system of *free* schools, a single necessary item of school apparatus like text-books should be purchased by the pupils, and not furnished at public expense. Why are the pupils not also required to bring their own chairs, crayons, and erasers? They could furnish these with just as uniform and satisfactory results as they now furnish the text-books, and a considerable item of cost would thereby be saved to the tax-payers.

Uniformity in seats, however, is found to be so desirable, that although a given seat is as much for individual use as a given text-book, they are provided in the aggregate at public expense. So with crayons and erasers. A sufficient and timely supply of these things cannot be secured in any other way. Common experience and common sense both teach this. But how do text-books differ from seats, desks, crayons, etc.? Are they less necessary? Are uniformity and a sufficient supply less desirable in the matter of books than in the matter of desks and crayons? Surely no one will assert it. And yet pupils are generally required to bring text-books and are never required to bring seats, desks, etc. In the latter we see the convenience that comes from a full supply and from uniformity; in the former the inconvenience and weakness resulting from heterogeneous texts, a deficient supply, and too many classes, to say nothing of the diminished attendance resulting from a poverty that is unable to purchase books at all.

Let districts only regard text books as one of the necessary items of school furniture, to be provided and cared for at the public expense, as other necessary items are, and instantly all complaints will cease. Books will no longer cost too much, no longer be changed at the whim of the teacher, no longer by their absence delay for days or weeks the prompt organization of the school, no longer debar from its privileges the children of the itinerant and the poor,—in a word, no longer detract, as now, so largely from the harmonious and efficient working of our educational system.

* From the pen of Hon. Edward Searing, Superintendent of Public Instruction of the State of Wisconsin.

OBJECTIONS CONSIDERED.

Two objections to free text books are brought by many of those to whose attention the plan is presented for the first time. One is that district ownership of the books would not insure them the same care as personal ownership; and the other is that taxation for the support of schools would be increased by the free plan. These objections are exceedingly welcome because their refutation is so easy, and because they afford an opportunity to present additional reasons in support of the system.

1. The objection that district ownership would not insure ordinary care of the books is at once more than met by referring to the overwhelming evidence that, in nearly all of the places where books are furnished free, *they are better cared for and last longer than when owned by the pupils.* This evidence is so abundant and emphatic that it surprises while it convinces. Two or three fragments of it, given in the last annual report of the State Superintendent may not be amiss here.

The Superintendent of the schools of Fall River, Mass., writes: "The books are very much better cared for. This may seem strange to you, yet it is a fact." The Superintendent of Lewiston, Maine, writes: "Books are much better cared for than when owned by pupils, and are entirely free from pencilings and obscene drawings, etc." Dr. Wm. T. Harris, of St. Louis, writes that books are furnished free to indigent pupils in that city, to the number of 5,200, or 13 per cent. of all enrolled. He declares that the free plan "greatly aids" school efficiency, attendance, etc., and says, in answer to the question whether the books are as well cared for by pupils as if owned by them, "Yes, better." The testimony of Dr. Harris is especially significant. The two plans have been in operation in St. Louis side by side for twenty years, and the children who there use free books, are, from their home surroundings and training, the least likely, upon the whole, to take good care of them.

The educating influence over pupils of the enforced care of books which they use but do not own, would be *no mean factor in their school training*, as all persons know who have observed in schools the large proportion of volumes dog's-eared, torn and defaced with the pencilings of idle or thoughtless moments. The writer's attention was peculiarly called to this fact when, recently, his own boys, aged seven and ten, brought home their books, at the close of a school term deplorably misused. Two readers, new but a few months before, had their corners gnawed off to the print, many of the leaves loose, and their pictures nearly all gorgeously "improved" to childish eyes by the free use of red and blue pencils! It was a source of mortification and surprise, and the thought instantly arose that the school was sadly deficient in one particular. Respect for books was not taught there. Such treatment of a desk would have been impossible, because that is city property under the teacher's care. Observation has convinced the writer that such cases are numerous, even in the best schools; but the incident mentioned was an *ad hominem* argument of peculiar force.

2. To the objection that taxes would be increased, answer is made: They would be; but on the other hand the aggregate cost of books would be diminished *more than one-half.* Nearly or quite half is saved in first cost, by the district's purchasing directly from publishers, and there is a considerable further saving in the better care and longer use of the books. The latter will be used in the school until worn out, instead of being consigned, in more or less good condition, to the lumber rooms of private houses, the asylum already of a countless host of half-decayed text-books.

The aggregate money gain to the district is, then, large and immediate, through a small loss in taxes. To the average tax-payer there could be no loss; to many there would be a gain. Let the man who is more than the average tax-payer reflect that through his slightly increased payments, the efficiency of the school he is obliged in any event to help support, is greatly enhanced, its attendance increased, and hence the money he already pays made to yield a larger return to the community and the State.

With free text-books in all our schools the the itinerant portion of the people would find no gain in State uniformity, even if it were practicable, and the multitude of those in or on the borders of poverty would no longer find at the threshold of the school the tax which is now unquestionably a prominent cause of the non-attendance so widely deplored. Furnish free books to all, and the aggregate school attendance of the State would be increased by thousands.

Of course, the successful working of the plan of free books involves some intelligent and strict supervision, but nothing beyond the easy possibilities of nearly every rural

district in the State. The books purchased should be kept in the district by some responsible person, in quantities a little ahead of the needs of the school. A printed label should be pasted on the inside of the cover of each, and during term time the books used by pupils should be under the care of the teacher. Each pupil should be invariably required to cover with strong cloth the book loaned him. As often as once in two weeks every book should be examined by the teacher and its condition noted. Payment for the loss or willful injury of a bock must be promptly made. The more elementary books need never be taken from the school room. The older scholars, who would use their books at home, would of course be allowed to take them. Any pupil preferring to own his book should have the privilege of purchasing, at cost.

MOVEMENT IN WRITING.

J. D. HOLCOMB.

HAVING had considerable experience in teaching penmanship, and enjoyed abundant opportunity of observing the most successful manner of teaching which our leading professional penmen employ, I am constrained to offer my views briefly on movements in writing. Penmen disagree somewhat in regard to the movement to be taught to pupils as a first exercise. We consider the Whole Arm movement as being especially adapted to the requirements of beginners. It is produced by the action of the whole arm from the shoulder, resting on the nails of the third and fourth fingers. The pupils should have the movement and the manner of producing it fully illustrated and explained, and then be given some easy exercises for practice. The continuous oval is usually given as a first exercise, as it is of a simple character and calculated to develop great freedom of movement. After the pupil has become measurably proficient in this exercise, he may have the Muscular movement explained and illustrated to him. It is produced by rolling the arm on the muscles below the elbow, the fingers constituting a fixed rest, and making the same motions as the hand. Much stress should be laid on the acquisition of this movement, as it is emphatically the one for business writing. The pupils should be given a great variety of movement exercises, and after they have become familiar with the movement, counting and dictation exercises may be introduced with beneficial results.

We notice a protest against "Writing in Concert." We admit that there are objections to a system of drill which retards or increases the movements of an amateur writer; yet beginners who are just attempting the proper formation of letters can, in our estimation, practice concert writing with much success. Some scholars move too rapidly, without taking sufficient pains to properly form the letters. Others move too slowly, with an irregular, tremulous motion. It is, therefore, well to retard the movement of the former and accelerate the latter, so that each scholar will not only form the same letter, but the same part of the letter, simultaneously. Thus, by retarding the one and accelerating the speed of the other, the evil tendencies of both are counteracted, and we strike the "golden mean," which cannot be reached so rapidly or surely in any other manner.

We would never suggest the teaching of the finger or combined movements, but would concentrate much attention on the muscular, and you may rest assured the pupils will possess the others more than you would anticipate.—*Indiana School Journal.*

A WORD ON PRACTICAL EDUCATION.

PROF. N. C. SCHAEFFER.

NOT long ago, while listening to one of the best institute lecturers in the State, I was struck with the evident unfairness of many teachers, who pass judgment upon foreign systems of education. Because some Germans in this country fail to earn a decent livelihood in spite of their surprising linguistic attainments, the inference was drawn that the school systems of the fatherland pay too much attention to theory and not enough to the demands of practical life. The old, familiar story of the two holes for the cat and her kitten, (which is authentic of Newton, if of anybody,) was related as showing what German professors are capable of in the way of practical blundering; and then the subject was dismissed, as if the proposition of the lecturer were established beyond the shadow of a doubt.

This line of argument manifestly proves

too much. Let any one, who has been educated in our public schools, migrate to Germany, and he will find that he is as little prepared for practical life in that country as Germans usually are when they land on the shores of America. The only sure way of testing any system of public instruction is to study its surroundings and to measure its adaptation to the wants of the people among whom it prevails. German schools do not educate their boys and girls for life in a foreign land, but for life at home. In other words, education must be specific. To send a boy to Germany and allow him to get his entire education there is *really to unfit him for life at home.* This, however, is no argument against German schools as such. They may, nevertheless, meet the requirements of the social and national life of the people by whom they are supported with such proud zeal. The success of German manufacturers at the different world expositions indicates practical efficiency in early training, although the writer's observation does not enable him to judge of and affirm anything more than the eminent fitness of the lower schools to prepare young men for subsequent study at the Universities.

We sometimes boast of the number and character of our inventions, and infer that we are practical above other nations. The mechanical ingenuity of our people has been called into activity by the needs and the extent of our immense territory. What use can a peasant make of a reaper if he has only a few acres to till? It would have been stupid for any one to try to invent for him a machine such as those used by American farmers. Under such circumstances the absence of inventions is no proof of inefficiency in the systems of public instruction.

It is simply impossible for our schools to fit pupils for all the avocations of after-life. In the few years devoted to school-life no one can serve an apprenticeship for all kinds of business. "Practical knowledge, having only usefulness in view, must spread itself over a large field; it thus becomes superficial. But no knowledge is less practical than that which does not exhaust its subjects." No science has led to greater achievements than mathematics, and yet mathematics is the most theoretical of all sciences.

The tendency of modern writers on arithmetic is to introduce into our text-books all sorts of questions taken from business transactions. This tendency is right only in so far as it does not interfere with the ends of mental discipline. Far better is it to spend time upon the principles of mathematics than upon the endless details of practical life, because the pupil, who has mastered the former, will have no difficulty in mastering the latter, should occasion ever require it. Mental discipline always has been and always will be of far greater value than extensive knowledge. If the teachers of our public schools could be brought to recognize this truth, it would save them from a multitude of errors in their methods of instruction.

SCHOOL TACTICS.

J. BALDWIN.
President Kirksville, Missouri, Normal School.

PROPER school tactics save time, impart vigor, improve the appearance and spirit of the school, and train to the habit of exact and prompt obedience. Order results from system. A want of system in the movements of the school is a prolific source of confusion. The teacher, not less than the general, needs to be master of a well-adapted system of tactics.

School tactics should not be arbitrary. Principles must determine the movements and the signals. Even children ought to be able to perceive the fitness of the tactics.

I. PRINCIPLES.

1. School tactics should be uniform. So far as applicable, the system of tactics should be the same in all schools. The tactics of the army are the same throughout the nation. The combinations and changes of teachers and pupils continually going on, demand the same uniformity for the schools. Variety in instruction, but uniformity in movement, is a desideratum in school management.

2. Each movement should be necessitated by the school work. All movements for show will be discarded. The necessity for each movement should be apparent. All changes will be effected in the shortest time consistent with perfect order.

3. The signals should be few and significant. The correctness of this principle will hardly be questioned; but, in practice, its violation is almost universal. Some schools use more than one hundred arbitrary signals daily. The waste of time and energy is immense.

(1) *Few.* The signals are for children. Many signals confuse, and to master them wastes much of the energy of teacher and pupils.

(2) *Significant.* Pupils are continually entering the school. Significant signals need no explanation. Arbitrary signals, such as counting, or tapping the bell, must be explained many times. From force of habit many teachers will continue to use the bell, but the general use of significant signals is only a question of time. The teacher who once tries them will always use them. In the following system the arbitrary signals, in common use, are omitted.

4. A signal should be used for but one movement. When a signal is always used for this movement, the pupil learns to respond almost mechanically. Confusion is avoided, and the utmost simplicity is reached. Without thought, this almost self-evident principle is constantly violated.

5. The signals should be given with the falling inflection, and in a low, firm tone. The elocution of the teacher is an important factor in the government of the school. The thin, faltering tone and rising inflections cause even the children to smile.

6. All movements, should be executed quietly, quickly, and with military precision. The noisy, sluggish, slovenly movements of some schools are distressing. The results are a lack of interest, disorder, and bad habits. Precision gives interest. The old veteran never wearies of going through the manual of arms. Good penmen and musicians never lose interest in their arts. Strictly observe this principle, and your pupils will be delighted, will acquire the habit of prompt and cheerful obedience, and the appearance and spirit of your school will be vastly improved.

7. Movements should follow signals. This principle requires the observation of the following points:

(1) No movement is permitted except in obedience to a signal. Otherwise confusion reigns.

(2) The movement ordered must be executed before the next signal is given. Allow sufficient time for prompt execution.

II. GENERAL TACTICS.

We will consider school tactics under two heads—general and class tactics. General tactics include the movements of the entire school; also such tactics as are common to the school and the class.

I. Calling School.
1. Ring bell.
2. Give time to assemble.
3. Attention (command.)

1. Ring bell. In small schools the teacher ordinarily rings the bell. If a pupil can be trained to do this it is better for, then, the teacher can devote his time and energies to other work. But it must be considered an honor, and one pupil should not be continued in the position too long. No one must touch the bell except the pupil designated.

2. Give time to assemble. From two to five minutes are necessary. Small schools can assemble in from two to three minutes. In large graded schools the pupils form in columns and march to their respective rooms. In all schools the pupils must pass orderly to places.

3. Attention. The clock indicates that the time is up. The programme clock strikes. At the word Attention, there is absolute stillness. The teacher gives the necessary directions, and all enter upon the work of the hour.

4. Remarks. (1) The same order is observed, morning, noon, and after each rest. (2) Those not in seats when the word Attention is spoken, are tardy. (3) No boisterous conduct must be permitted while assembling. (4) Instead of uttering the word Attention, the teacher may strike a call bell, but the word is vastly better.

II. Hand Tactics.
1. Hands
(1) To answer.
(2) To criticise.
(3) To ask question.
(4) To concur or oppose.
2. Down
(1) When recognized.
(2) When one is called.

1. Hands. No one speaks without permission. This regulation is imperative and absolute. In all cases the desire to speak is indicated by raising the right hand.

(1) The pupil raises his hand whenever prepared to answer the question or do the work required. All should be made to realize that it is wrong and dangerous to raise the hand unless prepared.

(2) Each pupil is held responsible for each answer. All that object to the answer given, raise their hands. Any one wishing to offer a criticism raises the hand. A failure to raise the hand indicates approval.

3. The pupil wishes to ask a question in class or seat. The desire is indicated by raising the hand. Whenever possible, the question should be both asked and answered silently. One finger means a request to leave the room; two fingers permission to get a book, etc. The teacher may answer by an inclination or shake of the head.

2. *Down.* (1) Whenever the teacher recognizes the pupil, the hand is dropped. (2) When any one is called to answer, all hands are dropped.

3. *Remarks.* (1) The hand should be held about as high as the head and held still. (2) Snapping fingers must never be tolerated. (3) Pupils not raising hands should frequently be called. (4) The teacher should be wide awake so as to see all hands as soon as raised. (5) Pupils must not raise hands except for good cause.

III. Dismissing School
1. School, Attention!
2. (General Business.)
3. Arrange Desks.
4. Ready.
5. Rise.
6. 1, 2, 3, 4—1, 2, 3, 4—(count.)

1. *School, Attention.* All sit erect and await orders. A slight tap of the bell may be substituted for this signal.

2. *General business.* Here the teacher makes such remarks as may be deemed necessary, and attends to any matters pertaining to discipline, etc. Be exceedingly brief.

3. *Arrange desks.* Quietly, books to be left are placed in desks, and others are arranged for carrying. Division leaders distribute hats, wraps, etc. If the building is properly arranged this is unnecessary, as each one can get his things as he passes out.

4. *Ready.* All prepare to rise. The teacher pauses a moment. All is readiness and stillness.

5. *Rise.* Simultaneously all rise, and each turns in the direction he is to move. A signal for turning is unnecessary.

6. *March.* It is best to count, 1, 2, 3, 4—1, 2, 3, 4, and at the second (1) have all step off with the left foot, and keep time to counting. After the first week, the school will be able to march to music. Let the divisions follow each other, so as to have all move at once.

7. *Remarks.* (1) Observe the same order in dismissing at all recesses, at noon, and in the evening. (2) Order in dismissing adds much to the character of the school. (3) By observing some system, many colleges might avoid those fearful *rushes* and daily *mobs*.

III. CLASS TACTICS.

I. Calling classes.
1. Ready.
2. Rise.
3. Pass.

1. *Ready.* Before giving this signal, the teacher may name the class. This will not be necessary after all become familiar with the programme. Each member of the class instantly takes a position ready to rise.

2. *Rise.* All rise at the same instant, and each turns in the direction he is expected to move. It is understood that each pupil steps into the aisle on rising.

3. *Pass.* Quietly and quickly all pass to recitation

seats, or to places at the board. Below the high-school classes will generally pass directly to the board. The teacher will plan so as to avoid all confusion. At the board, each stands facing the teacher and awaits orders.

4. *Remarks.* (1) In the same way move the class from recitation seat to board, omitting first signal. (2) Some teachers move their classes by calling the pupils one by one, thus wasting precious time and showing a great lack of management.

II. Class Symmetry. { 1. (Position.) 2. (Straight lines.) 3. (Stand erect.)

1. *Position.* Place the tallest in the middle of the class, and the others each way according to height. The reverse order is equally good. You secure symmetry and each pupil always knows his place. Since "turning down" has been abandoned, this arrangement is being generally adopted.

2. *Straight lines.* By this is understood that pupils shall stand in lines parallel with the boards. It requires tact to train pupils to keep this position. Avoid the mistake of constantly telling. Manage.

3. *Stand erect.* No lounging must be permitted. Appearance as well as health require the erect position. Have your pupils always stand and sit erect, and it will soon become to them a habit of great value.

III. Board Tactics. { 1. Board. 2. Erase. 3. Attention. 4. Write, etc.

1. *Board.* All turn to the *left*, to be in position to erase or write. Train all to turn quietly, quickly and gracefully.

2. *Erase.* This signal may include the first. When facing the teacher, it means to turn to the board and erase. The eraser is pressed on the board and drawn down, thus avoiding dust. There should be an eraser for each pupil in the class, and a trough beneath the board for crayon and eraser. At the signal, *Board and erase*, pupils pass from recitation seats to board, and erase.

3. *Attention.* All instantly turn to the *right*. No one must wait even to finish a figure. All face the teacher and await orders.

4. *Write, solve, etc.* Before beginning the work, the class will usually be divided into sections of two or more each, and work assigned accordingly. The signal given will depend upon the work to be done.

5. *Remarks.* (1) The skillful teacher uses the board almost constantly. (2) Lack of system in board tactics is a very common fault. Confusion, dilatory movements and waste of time are the results. (3) A green boy in charge of a regiment, and a stupid teacher in charge of a class, are ridiculous and pitiable objects.

IV. Concert Tactics. { 1. Class. 2. Division, etc. 3. Boys, girls, ladies and gentlemen. 4. Ones to twos; twos to ones.

1. *Class.* All answer. In general exercises of the entire school substitute *school* for class.

2. *Division one, etc.* The school and the classes are separated into several divisions. The division called responds, *section*, is the signal when a particular section is called.

3. *Boys, girls.* Sometimes it has a good effect to call on the boys and girls to answer in turns. *Ladies, gentlemen*, are signals used for advanced classes.

4. *Ones to twos; twos to ones.* It is an excellent device to divide a class into sections of two each. At the signal, *ones to twos*, the ones recite to the twos, as directed by the teacher. Much individual work is thus secured.

5. *Remarks.* (1) No one must answer unless called individually, or designated by one of the concert signals. (2) The running fire kept up between a random teacher and his class is absurd enough. (3) Avoid much concert work. Use it for spice and drill, but do not rely upon it. (4) Let concert answers be given in a low, distinct tone. Nip all tendencies to sing-song.

V. Dismissing Classes. { 1. Ready. 2. Rise. 3. Pass, or seats.

1. *Ready.* The board will be cleared before this command is given. As this signal is never given except when the pupils are about to move, no misunderstanding can occur. If at board, the pupils deposit crayons and erasers and turn in the direction to move; if at seats they prepare to rise.

2. *Rise.* The pupils rise and turn. If the class is at the board this order is omitted.

3. *Pass, or seats.* In dismissing a class, pass is always used; in sending the class from boards to recitation seats, seats is the signal. The order of passing will be so arranged as to consume the least time and produce no confusion. Some teachers have the pupils stand after passing to desks. At the signal, seats, all take seats at once.

To young teachers. By a few hours patient study and a few weeks careful practice, you may master this system of tactics. Soon you can work vigorously and easily, and you will find that you have almost doubled your efficiency as a teacher.

PREACHING WITH A SHOVEL.

EMILY H. MILLER.

IT was a dreary winter evening, and Laura was snuggled up in a corner of the sofa with her book in her lap, just in the middle of a most delightful story. The boys were playing in the corner, and now and then she caught a scrap of their talk. Rob was putting his locomotive together, and Fred was arranging an orphan asylum with his alphabet blocks. Twenty-seven orphans were ranged about the carpet: some of them in bed, some eating soup out of Laura's china dishes, one desperate fellow in solitary confinement behind the door, and a long row learning to read from bits of newspaper.

So, presently the orphan asylum was turned into a gymnasium, where twenty-seven little acrobats stood on their heads, walked on their hands, turned somersaults, and performed all manner of wonderful feats. Then they were all convicts in State Prison, and Rob came and preached them a sermon. This was the sermon:

"My brothren"—

"People in jail aren't *brothren*," said Laura, looking up from her book.

"Oh, yes, they are," said Rob; "brothren is just a kind of preach word, and means everybody but the minister. My brothren, folks ought to be good and not steal things, and quarrel and get angry. When you begin to be bad, you can't tell how bad you may get to be. The minister knows of a boy that begun by wouldn't let his brother take his

skates when he didn't need 'em at all himself, and he grew up so't he set a house afire."

"Is that *true*, Robby?" asked Fred with very big eyes.

"Course not; that's a 'lustration. Sermons are true, and 'lustrations are just to make you understand 'em. Now, my brothren, you mustn't steal, or do any more bad things, 'cause you can't do it anyway, and if you try to get out they'll shoot you."

The convicts now marched back to their cells under the sofa. Rob lay upon the carpet with his arms under his head, and said, very slowly, "When I am a man, I shall be a minister."

"I thought you were going to be an engineer," said Laura.

"Well, p'raps I shall. Cars don't run on Sunday, and I could think up my sermons all the week and then go and preach 'em."

"Oh, you can't make sermons just thinking them up on an engine," said Laura positively, "you have to do them in a study with books and writing."

"I could," persisted Bob; "I shall say my sermons like Mr. Challis, and I know lots of texts."

Laura looked at papa, who was smiling at them over the top of his paper, and asked doubtfully, "Could he, papa?"

"I suppose he could," said papa.

"But I thought ministers had to be just ministers, and not part something else."

"I know of a boy," said papa, "who preaches first-rate sermons, and he does a great many other things—goes to school, brings in wood, takes care of a horse."

"Me, papa?" asked Rob.

Papa laughed and shook his head.

"He preaches them to the people on the street; he preached one to me to-night."

"Oh!" said Laura, and Rob sat straight up and looked at papa.

"He preaches them with a shovel."

Rob laughed heartily at this, and Laura looked more puzzled than ever. Fred came and leaned his arms on his papa's knee.

"How, papa," he asked, "how could anybody preach with a shovel?"

"I'll tell you," said papa. "All through this month of snowy weather there has been one hundred feet on Beach street of clear, clean sidewalk. No matter how early I go down town, it is always the same—clean to the very edge of the walk. People pick their way through the slush, or wade through the drifts, or follow the narrow crooked path the rest of the way; but when they come to this place, they stamp their feet, and stand up straight and draw a long breath. The boy that keeps that sidewalk clean preaches with his shovel. It is a sermon on doing your work well, and not shirking; a sermon on doing things promptly without delaying; a sermon on sticking to things day after day without wearying; a sermon on doing your own part without waiting for other people to do theirs."

"Maybe a man does it," said Rob.

"No, it is a boy; I have seen him at it. I saw him one day when it was snowing very fast, and I said, 'Why do you clean your walk now? it will soon be as bad as ever.' 'Yes sir,' said he, 'but this snow will be out of the way. I can brush it off now easily, but when it is trampled down it makes hard work.' I call that a first-rate sermon, and every one who does his work in his very best way, preaches a sermon to all around him."

The bell rang and somebody called papa away, but Rob kept thinking of the little crooked, uneven path he had made to the barn and well, and what a stingy little pile of kindlings he had split for the kitchen, and he made up his mind he would try and preach a sermon with the shovel the next day.

Laura saw that her mother had laid aside her own book to show some pictures to little Nell.

"That's what mamma is always doing," she thought, "preaching sermons about loving other people better than yourself; I guess I'll preach one about, 'Do unto others,'" and Laura left her story and amused her little sister until her blue eyes were too sleepy even for smiles.

The next day Rob widened his path and shoveled it clear down to the firm ground, and then he called Fred to admire it.

"It's nice," said Fred, "I guess it's as nice as that sermon boy could make.

"'Spos'n we go and shovel a path for Mrs. Ramney."

"Come on," said Rob; "that'll be a sermon about—about—I wonder about what?"

"Being kind," said Fred; "but I don't know what the text for it is, unless it's 'Love one another.'"

"That's a pretty good text," said Rob; "that fits to most anything good."

Phrenological Journal.

CRAMMING.

WE have studied with much care the proceedings of many of our schools and colleges, and think we have fathomed the principle that underlies their management. The aim of these excellent institutions unquestionably is to diminish population and kill off or irreparably injure the youth of the day. An unprejudiced examination of their methods, and the untiring energy with which these methods are pursued, will, we are certain, convince any candid mind that this is the special work of many of our seats of learning. The work has been carried on with unremitting zeal, and the reason that the results have not been more successful is that such great evils as young people cannot be entirely removed at once. Even the prompt and energetic measures of Pharaoh and Herod in murdering all the children under two years of age only afforded society a temporary relief. Being fully persuaded that young people have no business here, much less any right to determine what shall become of them, we would modestly suggest a system which will, we trust, prove expeditious, economical, and easy of execution; and, being based upon nearly the same principles as those in use in many schools and colleges, cannot fail to be successful. Our method is beautiful in its simplicity. It is, briefly, feed the children to death.

It may be said that this is a poor economy, and that, moreover, the plan has been tried and proved a failure. That strawberry festivals have been given under the most favorable circumstances, and the population was not diminished by one-tenth, is not to be questioned. Yet it is manifestly unjust to expect to accomplish in a day, or even two or three days, what is now the work of years. You cannot hope to demolish a naturally strong constitution by one festival, no matter how well managed. We maintain that the experiment has not been carried far enough. As to the expense, it is true that even the most moderate-priced food, such as milk for babes, is not as cheap as much of the instruction given to our children in the schools; but, on the other hand, if the same quantity of food were given to their bodies which is now bestowed upon their minds, in the same space of time, the result would be much more speedy. One simple illustration will prove the truth of this statement. A young girl writes home from school that she had been ill for two weeks, but that by studying night and day she had been able to catch up with her class. Three days after the school had closed the young lady died of brain fever. Now, it is clear to the most superficial observer that if the girl had been constantly fed, day and night, she could hardly have lived two weeks. This seems to us to prove conclusively the superiority of our plan to those now in use.

We are convinced that if book-cramming were abandoned for food-cramming, shortness of life among the young could be secured with more certainty. If the book-cramming system be, as it undoubtedly is, so widely popular, why should not food-cramming become even more so? The arguments for both are almost identical. First, it is necessary to eat. Children should be taught to eat. Having been taught, they should be made to eat, as some children would rather play or read than eat, and some refuse food from pure disinclination for it. The natural appetite of the child must not be consulted, as this would interfere with the marketing system whereby the mutton of to-day succeeds the beef of yesterday. The natural capacity of the children cannot be taken into account, as it would entail endless labor in adjusting the right proportion of food to their different stomachs; besides this, they might take advantage and eat more on some days than on others. It is better to educate an equal digestion, as there are children who love eating for its own sake; it would be unfair to shrink their appetites, and one rule must answer for all. In one or two schools where the food-cramming system has been followed the children have received credit marks for the amount they have consumed. It is impossible to enter on the merits of this rule at present, though we may remark in passing that it seems to us to engender a spirit of rivalry and deceit. Children in these schools have been known to throw away the food given them, and thus received marks for what they had never even attempted to digest. We do not claim infallibility for the food-cramming system. Children have been known to graduate from its schools and live to a green old age, though their stomachs had been overloaded for years. Yet the advantages they had received were not entirely wasted, as they had invariably a ruined digestion. If food-cramming were thoroughly tried, we feel certain that, though the decrease of population might not be at once apparent, yet future generations would be able to dispense with institutions both of learning and eating, as, in consequence of the impaired digestions and overworked stomachs of their ancestors, they will be idiotic or incapable of taking any nourishment whatever. We are confident that the system needs only to be presented to an enlightened public to meet with hearty sympathy and cordial support.—*Boston Globe.*

A QUIZ PROBLEM.

TEACHERS frequently ask for a solution of the following:

$$x^2 + y = 7$$
$$x + y^2 = 11$$

The shortest known solution is given underneath for their benefit.

$$x^2 + y = 7$$
$$x^2 + y - 3 = 4$$
$$y - 3 = 4 - x^2$$
$$\frac{y-3}{2+x} = 2 - x \quad (1)$$
$$x + y^2 = 11$$
$$x + y^2 - 9 = 2$$
$$y^2 - 9 = 2 - x \quad (2)$$

Equating (1) and (2) we have

$$y^2 - 9 = \frac{y-3}{2+x}$$
$$y^2 - 9 = \frac{y}{2+x} - \frac{3}{2+x}$$
$$y^2 - \frac{y}{2+x} = 9 - \frac{3}{2+x}$$
$$y^2 - \frac{y}{2+x} + \frac{1}{4(2+x)^2} = 9 - \frac{3}{2+x} + \frac{1}{4(2+x)^2}$$

$$y - \frac{1}{2\,(2+x)} = 3 - \frac{1}{2\,(2+x)}$$

hence $y = 3$

$x = 2$

Again from $x^2 + y = 7$ we have

$$y = 7 - x^2$$

$$y^2 = 49 - 14\,x + x^4$$

and substituting the value of y^2 into $x + y^2 = 11$ we get $x + 49 - 14\,x^2 + x^4 = 11$ or

$x^4 - 14\,x^2 + x + 38 = 0$. By factoring we have $(x - 2)\,(x^2 + 2\,x^2 - 10\,x - 19) = 0$.

By Horner's method we get from the largest factor the three other values of x, which are

$$\begin{array}{r} 3.131312518+ \\ -1.848126527+ \\ -3.283185991+ \\ \hline 2. \end{array}$$

Two of these values are negative, and their sum is equal to 2, the coefficient of the second power of x, as the result must be if the work is correct.

Proceeding in like manner, we get from

$y^3 + 3\,y^2 - 13\,y - 38 = 0$ the values of y

$$\begin{array}{r} 3.5844283403+ \\ -2.8051180869+ \\ -3.7793102533+ \\ \hline 3. \end{array}$$

Milton, Pa. ELIAS SCHNEIDER.

MENTAL AND WRITTEN ARITHMETIC.

SEPARATELY OR COMBINED.

THIS is a subject which for several years has been demanding, and is now receiving especial attention. We have seen the ebb and the flow of the tide of public opinion in reference to mental arithmetic. Eighteen years ago, when Prof. Brooks gave us his Normal Written, declaring that a new era had dawned upon the world of science, that the "royal road" to mathematics had been so graded and strewn with the flowers of reason and philosophy that it had become full of interest and profit to the youthful learner; and that one of the most influential agents in this work had been the system of mental arithmetic—then the tide commenced advancing, and continued for years, until it was in almost every section of the country introduced as a separate branch of study, and until many of our teachers made a special hobby of it.

But soon the reaction came. "Too much time devoted to arithmetic!" was the cry, followed in many places by the discontinuation of it as a branch of study entirely, and now there are localities in which one might as well attempt to introduce a mental algebra or a mental geometry as a mental arithmetic.

It seems that owing to that spirit of go-ahead-ativeness peculiar to the American people, we are apt to run to extremes in whatever we undertake, and this is certainly true in reference to mental arithmetic. That too much attention has been given to the subject by many of our teachers, I think is a statement that admits of no doubt; that it should be discarded entirely, I seriously question.

The important question is, Shall it be taught in connection with written arithmetic or separately? We will notice the first steps in the study of arithmetic. A child obtains some idea of numbers at a very early age, and the first lessons in arithmetic that he receives, whether intended as such or not, consist of exercises in counting—first with objects, afterwards without objects. This, then, is oral or mental arithmetic. Next the child is taught the use of the symbols or figures used to represent these numbers which it has been taught to count, and thus written arithmetic is introduced.

In teaching the multiplication table one line is taken at a lesson; the pupils commit it, and are questioned in various ways in order to impress it upon their minds and enable them to become familiar with it; and simple problems involving the numbers in the line constituting the lesson are given, in connection with each line, for oral solution, and these then are followed by problems for solution on slates and on the blackboard.

Now, while some teachers may teach the fundamental rules of arithmetic without thus combining the mental and written methods, it is certainly true that they can be taught most readily and mastered most thoroughly by combining the two methods. Authors of primary arithmetics recognizing these facts generally have the subject so arranged as to be presented best in the manner already indicated. Now, if arithmetic can be best taught to primary pupils by combining the two subjects, what reasons can be assigned for teaching it differently to older pupils.

It is maintained that if we teach mental arithmetic at all we must teach it separately—that we cannot teach it and written arithmetic at the same time. While this is not disputed, it is equally true that in all the operations of written arithmetic, mental is combined with the written. The two subjects are inseparably connected. Then, why teach them from different books? or why have the same class at one subject in mental arithmetic and at another subject in written arithmetic? We might as well teach geography by giving a lesson in map questions on the United States in combination with the descriptive geography of China.

Mental thought always precedes written thought, and mental arithmetic should precede written arithmetic. If problems are solved mentally the entire attention of the pupil must be given to them, the powers of conception and memory are brought more fully into exercise, reasoning is better cultivated, and the teacher is enabled to accomplish more disciplinary work in the same time with individual pupils than in written arithmetic; and the pupil being thrown upon his own resources in solving mental problems, is prepared for the solution of similar problems involving larger numbers and a greater number of conditions by the written method.

Hence we say instruction should be given in mental and written arithmetic at the same time. Whatever the subject may be, let solutions, explanations and illustrations be given first by the teacher, and these followed by problems for solution: first, simple ones to be solved mentally, then more difficult ones to be solved with slate and pencil.

In primary classes when pupils shall have been taught to count, and have learned the value of figures, the first line of the addition table should be taught, then simple problems involving the numbers in this line should be given for oral solutions, followed by similar ones involving larger numbers to be solved on slates or at the blackboard, and these succeeded by the addition of larger abstract numbers. The same course should be pursued in teaching subtraction, multiplication and division;—the *explanation* of the problems solved by the written method to be similar to the oral *solution*.

I am convinced from personal experience that the lesson in written should be composed of similar problems to those for mental solution. If the subject in written is reduction of fractions, then let the lesson in mental consist of the same kind of problems. If the written lesson is Troy weight, let the mental be the same; the problems as a matter of course being more simple and not involving such large numbers. No difference whet her you have all the problems in mental solved or not. Select those that are best calculated to prepare the pupils for a correct understanding of the subject, and that will correspond with those in the written lesson. Then, after the pupils shall have completed arithmetic as far as the applications of percentage inclusive, if they desire to complete a thorough course in arithmetic, as in our high schools, let them take up the more difficult and uncommon problems in the mental in connection with algebra, after they shall have gained some knowledge of that subject. In this manner both arithmetic and algebra can be taught to much better advantage, and a more thorough knowledge of each can be acquired in less time than by the method heretofore pursued.

We have too many text-books in a series in arithmetic, as well as in reading and geography. Publishers and authors are becoming cognizant of this, and now we have several series of geographies complete in two books, and a course in arithmetic also complete in two books. This is what the people demand, our schools need, the times require, and the intelligent opinion of our educators will compel our bookmakers to give us.

We want a course in arithmetic combining the mental and written problems, as suggested, in two books—as one of our authors has attempted to give us, although he has failed to fully develop the plan—then for the benefit of advanced pupils, let such problems as the age, time, cup and cover problems, etc., be plaeed at the close of the book in connection with the usual variety of miscellaneous problems, and we shall have a *complete arithmetic.*

TWO TEACHERS.

LET us enter the room where one gathers about him more than fifty of all ages. He is certainly a plain-looking man; hair sandy, inclined to red; a freckled face, clothes of no fashionable cut; a stoop in his shoulders; his manners not engaging,—and yet he has evoked not only order but enthusiasm. We sit down and watch the scene. A class is called upon to spell. There is no noise or fuss made. One takes the floor as "head" and calls out the successive members, until all are in place. The words are pronounced:—whether, laurel, embryo, descent, voyage, dahlia, phlox, guitar, are among those we hear. Here we see boys of ten years spell valiantly with others twice their size and age. They try once, and if they fail the victor "goes up." But what we most admire is the calmness of the master and the earnestness of the boys and girls; one seems to know how to stimulate activity and when it is aroused how to use it. A class in reading comes on, and there is good reading in the first, second and third classes. They read naturally. We watch to see if the master will read, himself, for the benefit of the class. Yes, he takes the verse the pupils seem little to understand. It is in the matchless "Ode to a Skylark," by Shelley.

"Sound of vernal showers
On the twinkling grass
Rain-awakened flowers
All that ever was
Joyous and clear and fresh thy music doth surpass."

"Now, scholars, we cannot read it until we know well the meaning, so we will look at some of the words. There is *vernal.* This means pertaining to spring. The showers of spring are peculiarly pleasing, for every living thing seems to enjoy them; the *twinkling grass* is plain to be seen if you look. The rain weighs down the leaf and finally becoming too heavy it rolls off and the blade rises to be weighed down again; this is going on with thousands of leaves, so that *twinkling* beautifully describes the effect; it is very delightful to see. Then the *rain-awakened flowers*—these are the flowers that were tired and faint, but bathed in the sweet shower are renewed in life and beauty; nothing can be more beautiful than a rose on which the gentle showers have fallen. These three figures; sweet sounds, glittering grasses, rain-bedewed flowers—are the things with which he compares the song of the lark—all these, he says, the music of the lark surpasses." A few questions follow. It is plain that all understand it. Even the younger pupils are repeating the words. In fact, the teacher, we see, knows this by heart, and it would not be singular if the pupils knew it too. They evidently admire this poetry. The teacher reads the verse, and reads it with feeling. He understands the verse and interprets it. That is reading. The whole class practice it over, and then several singly. Next they recite the whole poem up to this point together, mainly without looking on the book. Next, the teacher calls upon some one who can recite a verse to rise and say it. Each has a verse and each recites. The whole was evidently a common and natural proceeding.

Our teacher next drilled the whole school from a chart, on the sounds of the vowels, then upon the consonants. The second reading class was very much like the first. The third was composed of younger pupils,

and there was here a close questioning to see if the meaning of the words was understood as well as that of the sentences. While we could not penetrate to the source of this teacher's power, it was pretty plain that he both loved and understood his work.

The other teacher we visited was of a different stamp. He had a better school-room and better desks, and better-looking material, and yet there was something wanting. The pupils recited their lessons in a mechanical way that showed "their hearts were far away." The teacher heard a spelling lesson and the spelling was fairly done; the reading classes read in poetry and prose, but there was no fire in the eye or feeling in the voice. The whole proceeding was destitute of the true elements of success.

We found ourselves studying up the case. We said to ourselves: "This man would not stay a day if it were not for the pay; he has no love for childhood; boys and girls have no charm for him; nearly all, doubtless, are nuisances. Their possibilities never strike him at all. He would never 'select a child and put him in the midst' as something to model by. And again we felt the responsibility had never weighed down on this teacher's mind. All the task he had undertaken was the filling in of certain pages of geography, grammar, etc. Yet he was not a bad man, he was well dressed, quite the man of fashion. We fell to asking ourselves, Does he read in the Bible? Does he copy from our Saviour? Does he pray for these young immortals? Does he rouse them to a sense of their capabilities? Does he strive to put their feet on the Rock? Does he build up character? Are his pupils fond of the truth? Will they go to the stake for their opinions? And we doubted the man's real permanent success.

This was years since. The boys of each have grown to manhood. The first one is still teaching; one of his pupils I saw the other day; he spoke reverently of his master. "All I am, I owe to him. I am not much, but I am an honest man, and such I shall remain." These and many such words lead me to think that the master lives in his pupils. The second is a real estate speculator, and, they say, has made money. I have seen one of his pupils too. He is worldly-wise and never refers to his boyhood days except when he sees his old teacher gathering more and more goods about him. Then, he says: "Egad, old Bowman never should have taught school; he loves money too well. He only stayed at it until he had laid by $1,000. We all knew he would quit as soon as he had made some money. He was no man for a teacher."

And I pondered upon the sentence, "He was no man for a teacher." Are there not a good many who are in the school-room temporarily and have no solemn settled purpose to do good there—to impart the noblest part of themselves? To which of these groups do you belong?

N. Y. School Journal.

SHOULD THESE THINGS BE SO?

W. T. SEAL.

IT may seem strange that we should raise the question whether the intellect receives any attention in some of our schools. But we do raise it. All will admit that we have much in common with the brute; that he possesses something by which he seems to form judgments and reach conclusions. But we question his ability to reason, and that there is one element of thought in any of his actions. Like ourselves, he has a sensorium in which contents in sensation are given. That he clearly distinguishes these contents, thereby obtaining perceptions, and that he connects these perceptions one with another forming judgments, we cannot believe. A sensation is given which arouses a congeniality toward a certain end. The animal acts, not from any clear conception of what is demanded either by prudence or sight, but because his instinct so prompts him.

The child frequently acts in much the same way. There is a little more consciousness, perhaps, of what it is doing, yet but a little more thought as to why it so acts. We frequently read of educated animals, and we may very properly ask what it is that is educated, led out. Is it an intelligence? Does any one suppose that the learned pig puts any thought into any one of his wonderful feats? Just here the wonder lies. Were there any thought in his acts, they would not be half so wonderful. Many who have watched his learned swineship, and his manipulator, have, no doubt, been convinced that his marvelous feats have been called forth by an appeal to sense, and to nothing that might be called an intelligence. He who supposes that the words used by the trainer in manipulating his swineship, have an essential part in the performance, has failed, we think, to discover the secret of his success. They are used simply to deceive the wonder-struck looker-on. Something else on the exhibitor's part, calls forth the instincts of the pig, and these acts appeal to sense only, as there is nothing higher to which to appeal. All animals are capable of more or less of just such training. The educated flea is a no less wonderful creature. The magician's canaries are no less entertaining.

If the mere animal can be so trained, there is, of course, the possibility that the child may receive a great deal of training that reaches no higher, and the sad thought is, that there is a vast deal of such an educating that leads, not to a growth of the spiritual, to a calling out of the higher nature, but to a development of the bestial and to *stupidity*. It is a well established law of physiology that the blood is sent in larger quantities to an organ or any part of it, as that part is more actively called into play, hence, we may

expect an undue development of the sensorium of the child, if it is the sense alone that is being cultivated.

We all know how acute the sense is in animals, the more acute because not endowed with the spiritual. In some more acute than in others. So in children, more acute in some than in others, hence, we sometimes meet with those who promise much but who disappoint sadly when they arrive at maturity. Their brightness does not proceed from the intellect, but from the sense. Neither does their training tend to a development of the spiritual but to a stimulation of the sense, hence when manhood is reached they are not the men that were expected. Much duller children with no greater spiritual powers, perhaps with much less quickness of sense, but with a more careful training of the intellect, have outstripped them and became much wiser and more useful men.

Ah! do we not incur a fearful responsibility when we attempt to train the mind of the child without understanding its nature, and is not the reflection a sad one that we may have led downward instead of upward? For "the spirit of the beast goeth downward," and it is that, and that only that is reached when the sense alone is led out. Why so many mental and moral failures? Is it not largely due to the system of training pursued in many of our schools? Unless a training secures the development and ascendency of the spiritual it is a failure. Does any one suppose that a simple cultivation of the memory or a mere cognizance of sounds is securing the development the child needs? We are aware of the fact that many have long since perceived this error, and we are also aware than in their endeavors to flee from it they have simply taken another road to reach the same goal.

Some years since, the writer with several others, attending a course of lectures on teaching was told by the professor to teach nothing without requiring the philosophy. He went forth, zealous in the philosophy of his master, but soon found that his method of teaching was a failure with the little ones. They were simply committing to memory his explanations—if getting them at all—putting but little more, if any, thought into their work than if their teacher had given and required no explanation whatever. He came to the conclusion that either himself or his pupils were sadly lacking in the spiritual, but received great consolation some time afterwards, when, visiting the same professor's class, he heard him announce, "It is a mistake to expect children to understand philosophy." Verily, the professor had grown wiser.

The reader may well ask, What is to be done? We must not train the sense simply that leads downward. We must not require children to philosophize; that leads to the same result.

"Poets are born," we are told, "not made." We venture a new proverb, "Philosophers grow, are not made." Frœbel saw this a half-century ago. Many see now as he did, but we fear that the great mass do not. The primary teacher, especially, is too apt to commence where he left off. He forgets that years were necessary for him to reach whatever facility of thought he may have possessed in his last school days. He remembers that he had to think in order to master his studies, and quite naturally concludes that his pupils must think, if they would master theirs. We grant that they must. But does he succeed in *making* them think? We fear not.

We know a faithful mother of a little boy. Scarcely an evening passes, that he is not called to her knee for what he considers a good time. A story is read or told, both ask questions, and already that boy has grown into a philosopher. He wishes to know the reason for nearly every truth brought to his attention. He is not satisfied unless he does know. In his classes at school, he stands beyond those of his own age because he has received a training at home that has led-out the spiritual that has developed him into a thinker. Being a philosopher, he takes naturally and kindly to the philosophy. Shall we venture another proverb, "The philosopher first, philosophy afterward.

Now, since all children have not so wise or faithful a mother, nor can be translated into Frœbel's child gardens, why may not the teacher imitate this mother? Why not a good deal more time, in our primary schools especially, devoted to rearing philosophers? It is "wisdom," not knowledge, that "is better than rubies, and all things that thou canst desire are not to be compared unto *her*." But the longing for it and the power to get it are to be found only in the spiritual, and that longing and that power cannot be forced into existence. The true teacher will awaken the longing and the power by exercises that appeal to the intellect of the child, and will then go before to guide until he has acquired the power to direct his own spirit.

We would advocate the introduction of a new exercise into our primary schools, that exercise to be the teacher playing the part of the mother of whom we have spoken. Why should not the teacher be allowed to reach the hearts of the little ones with stories and story-books? Many of them get no such a treat home, but do receive a vast deal of training of the sense plane, a great deal that calls into existence all of the sensuous. We must not wonder that so many go forth into life with no source of enjoyment except in the sensual. Their whole course of training—the school not excepted—has conduced to such a character.

Must this go on? Shall our children continue to be placed under the training of those who know but little of the nature of that which they are expected to mould? The State educates the child to secure protection. Do the methods of instruction pursued in many of our schools secure this? Granting that the methods may be good, have we not reposed too much confidence in instruction merely? Have we been educating, developing the powers of the child that he may go forth into active life with a mind used to thinking that shall enable him to meet with some prospect of success the difficulties that shall beset him.

But a small percentage of those who enter our primary and secondary schools, especially in our cities, ever get any higher; hence if they receive no training of the spirit in them, they may never receive any. We have wondered that the State has not seen more clearly that she is not receiving the protection that the expense which she incurs warrants, and the question may be very properly asked, whether she should not spend much of the money which her high schools now cost, in placing more ability in the primary and secondary grades. We are aware that this is not the popular view—that the cry is for higher institutions of learning at the expense of the State. This may be very well—although we question the right of the State to establish these at the expense of the people—but she should not rob herself and the little ones in so doing.

Our cities have but few thousand pupils in their grammar and high schools when compared with the many thousands found in their primary and secondary. The reports of their boards of education are not so tabulated that we can learn the cost per capita of tuition in the former as compared with the cost in the latter, but we venture that the contrast would surprise the members themselves. "Should these things be so?"

EXAMINATION QUESTIONS.

USED AT WINFIELD, KANSAS.

GEOGRAPHY.—Draw a map of North America, showing the mountain systems and leading rivers and lakes. What gulfs and bays indent the coast of North America? Name the New England States, and mention their chief cities and leading manufactures. Name the principal cities and the leading productions, mineral and vegetable, of the Southern States. Name five American cities in the order of their population, and give population as nearly as possible. Name and locate five European cities in the order of population. What and where are the colonial possessions of Great Britain? Give the leading agricultural and mineral productions of France; of Great Britain; of Australia; of Brazil. Where is Servia? Bulgaria? Belgrade? Constantinople? St. Petersburg? Berlin? In what does the country east differ from that west of the Rocky Mountains? In what does that east differ from that west of the Andes? Give the reasons for these differences.

ARITHMETIC.—If to a certain number you add its half, its third, and 28, the sum will be three times the number; what is the number? Wichita is forty miles on a straight line directly northwest of Winfield; how many miles will a person travel in making the journey, going on the section lines? A merchant sells cloth at $3.60 a yard, and gains 20 per cent.; for what price must he sell it to lose 15 per cent.? Divide 429 hundredths by 5 millionths, and from the quotient subtract 425 thousandths; express the result in the lowest terms of a common fraction. What will be the cost of laying a pavement 30 feet long and 8 feet 6 inches wide, at 60 cents per square yard? What sum of money will yield as much interest in 2 years, at 10 per cent., as $800 yields in five years and three months at 6 per cent.? What is the difference between the true and the bank discount of a note for $600, payable in 40 days, at 7 per cent.?

1st condition: The taxable property of Cowley county is $1,906,311. 2d condition: The tax levy for 1877 is to cover $72,000. 3d condition: Railroads are assessed at, say six thousand dollars per mile for taxable purposes. 4th condition: A railroad through Cowley county would have, say thirty miles of road bed. 5th condition: Railroad property bears its just proportion of the burden of taxation. *Problem:*—A owns real and personal property in Cowley county assessed at $3,000 for taxable purposes. If the county should vote bonds to the extent of $4,000 per mile, for thirty miles of railroad, to be paid in ten annual payments, and bearing interest at the rate of ten per cent. per annum, would A.'s taxes be affected thereby? If so, how and to what extent? What would be his taxes before, and what after, the voting of the bonds?

Divide $4\frac{1}{4}$ by 120,000, and subtract seventeen-fortieths from the quotient. A sold two lots for $260 apiece, gaining 20 per cent. on one and losing 20 per cent. on the other: did he gain or lose? and how much?

ENGLISH GRAMMAR.—What are the rules for forming the plural of nouns? Write the plural of church, glory, money, staff, alkali, hero, cargo, chimney. What are the rules for writing the possessive case? Give the possessive form of Socrates, princess, righteousness, thief, sheep. The laws of English grammar are founded upon what authority? Name some of them. Give principal parts of be, begin, bid, chide, choose, come, do, draw, drink, rise, drive, eat, fly, get, give, grow, go, lay, lie, ride, ring, see, sit, stay, strive, take, thrive, write. Give the present-perfect tense in the Indicative, Subjunctive, and Potential modes of the verb *come*. What is a simple, a compound, a complex sentence? Give an example of each. What are relative pronouns? Name and decline them. What are indefinite adjective pronouns? Name four intransitive verbs that become transitive when used in certain connections. Show such usage by sentences containing the verbs. Write four sentences with verbs in the active voice, then change the same so as to use the verbs in the passive voice. Correct the following sentences: (*a*) The condition of the crops show that the country has suffered much. (*b*) The trend of the Rocky Mountains are toward the south. (*c*) Sir Richard, with several others, were cited to the Star chamber. (*d*) Neither Webster nor Clay were elected president. (*e*) Between you and I his failure is certain. (*f*) Conjunctions connect words, phrases, and sentences. (*g*) I had ought to have did the work before leaving. (*h*) Who do you take me to be? (*i*) I shall try to have completed the letter by noon. (*j*) The rose smells sweetly. (*k*) I'll learn you how to behave yourself! (*l*) The river raised very rapid.

U. S. HISTORY.—Name the nations which led in the voyages of discovery in the fifteenth and sixteenth centuries? What were their motives? In what colonies was religious liberty enjoyed without restraint? What was the character of the settlers of New England? Of Virginia? What effect upon the colonies did the French and Indian wars have? What were the leading causes of the Revolution? What right had the colonists to resist the English government? Of what importance was the battle of Saratoga? Name the causes of the war of 1812, and locate the principal engagements on land and sea. Give the cause and principal events of the Mexican war. Name the influences which led to the Rebellion. Locate five battles on land, two on sea, and give the names of the commanding officers on the respective sides. Give the names of the leading inventions of this century, with the inventor's names. Give the names of three historians, three poets, three journalists, three essayists, three statesmen, and three orators of national repute. Under what three different forms of government have our people lived? What influences led to the different changes? When was our constitution adopted? Into what departments is our government divided? How are they filled? How is the constitution amended?

ORTHOGRAPHY.—Define tonics, sub-tonics, and atonics. Define spelling, and give two rules for applying suffixes; also two rules for applying prefixes. What is a letter, a word, and how many syllables can a word have? Spell phonetically the following words: acts, sixths, worlds, musing, foreign, bread,

union. When is the hyphen requisite, and when not, in the formation of compound words? Correct the following words: rhime, circingle, erisipilas, etamollogy, elipcis, sirtificate, rober, metafor, febuary, runing, program. Which of the letters, respectively, are labials, dentals, palatals, nasals, and on what is this classification founded? Correct the following sentences, in respect to capitals: (*a*) The boy appealed to Worcester's dictionary of the english language. (*b*) the proper use of capitals is always to be Observed. (*c*) The fear of the lord is the beginning of Wisdom, (*d*) I live as i list and I do as i please. How are words classified in regard to the number of syllables they contain? Give three examples of each of these classes. What is voice? What are cognates? Give a list of them.

THEORY AND PRACTICE.—Give (in the form of a letter addressed to the examining board) the following particulars: Name in full, the age, and post-office address; experience in teaching, number of terms taught, place of last school, rate of wages, grade of certificates, and the motives which prompt you to teach. (Your letter will furnish the basis for the examination in Penmanship.) How would you open and organize a public school, with classes ranging from the Primer to the Fourth Reader? What is the value of a programme of daily exercises in the school-room? Give programme for school of grade indicated in question two. What different systems of instruction are followed in teaching young pupils? Define each one fully and exactly; designate the most meritorious method, and give reasons for its superiority. What mental faculties are used to the greatest extent by children? and what important directions should this fact give to educational methods? What laws should be taught and inviolably observed by the teacher in training young pupils? What are the uses of educational journals? What organs of this class do you take and read? Name some of the leading subjects which have been noticed in the journals which you have read this year. Do you secure punctuality, regularity, attention, and thoroughness on the part of your pupils? If so, how do you attain these ends? If not, why not? What influences out of school most seriously affect the pupil in school? and how may parents aid the teacher in matters within the school-room? What importance should be given to gymnastics, music and drawing in public schools? and how do you teach these subjects?

NATURAL SCIENCE.

ITS RELATIONS TO ORDINARY EDUCATION.

AT the annual examination of the Dollar Institution, England, Dr. Andrew Wilson delivered an address on "The place and power of Science in Ordinary Education," the following report of which appears in the *London Educational News:*

Dr. Wilson confessed that he appeared before them that day as a kind of special apostle of science, and of a branch of knowledge which, he contended, constitutes a means for affording to the world a large creative measure of "sweetness and light." He wished to say a few words about the value of science in ordinary education—firstly, because Mrs. Dollar had always exhibited a most laudable desire to advance science-instruction; and secondly, because he himself was especially interested in the wide diffusion of scientific knowledge amongst the young. There are still very many worthy persons who either can not or will not allow that science-instruction is a great power in ordinary education; and there are also numerous educationists themselves who actually resist, with a sternness worthy of a better cause, all tendencies to enlarge the perceptions, and to extend a knowledge of the outer world and its belongings, by the introduction of science into schools.

He presumed the opposition which science has encountered is simply due to the natural spirit of opposition with which every new measure, in education especially, has met; whilst it is a very notable fact that the strongest measure of opposition to science comes from the classical quarter, and from a certain section of educationists, who appear to consider that Greek and Latin constitute the only means of culture at the command of the human race. Now, he was one of the last to decry classical training. He thought there was much in the classics, not only of high value as a means of culture, but which might effect an amount of good in mind-training difficult of acquirement in any other way. He had, however, yet to learn that science and classics might not be taught consistently and together; and he appealed to the practice of the Dollar Academy to say whether the long association of science and classical training has had the slightest deteriorating effect on either study. As far as he could ascertain, the classical side is in a most flourishing condition; and science appears to have taken a new lease of life, in the institution of defined courses of study, conducted by Mr. Smith, their science teacher—a gentleman whose personal acquaintance he had only made that day, but of whose capabilities of teaching science in a true and satisfactory manner he had received ample proof.

He had no intention of delivering a long oration, but he could not conclude without making an appeal to the large assembly before him, to support, by their countenance, the growth and extension of science-teaching in schools. The familiar notice, "To Parents and Guardians," might very well be addressed to the assemblage in this case.

He asked whether it was not to be regarded as a strange anomaly, in this advanced age of culture and thought, that boys and girls are allowed to leave school without possessing the slightest information regarding the world in which they live, and of which, indeed, they form a part? He would put it to his hearers, whether or not they would regard it as a veritable blank in the educational calendar, if the child was allowed to gain no ideas regarding Nature at large? He took his stand on the broad principle that, in a child's mind, there exists a distinct niche, which is destined to be filled and occupied with knowledge of the world. Why, the very first questionings of childhood are about animals, and plants, and regarding the universe and the common objects around us; and would any sensible parent object to a system of training which is adapted to answer the natural and spontaneous inquiries of childhood? But let them also think how much of beauty and pleasure any one, old or young, loses through inability to discern purpose, and use, and contrivance, in the domain of nature.

How very many persons go through life literally with their eyes shut to the countless sources of intellectual and physical delight which await them in the simple study of natural science! Many persons have no knowledge, for example, of the causes of a rainbow; and there are comparatively few who can give an intelligent explanation of "the reason why" grass is green, or of the purposes served by the apparently uneventful and seemingly purposeless visits of insects to flowers. Yet, what a vista of knowledge and information the contemplation of such subjects opens up; and the study of natural science may fairly be said to have no equal in training the observant faculties and imparting habits of order and method which would bear fruit when the school days and science-lectures are things of the past. It requires no special training to become a successful science student—it is, in fact, one of the characteristics of science-study, that it teaches its own method, and gradually inures the pupil, as he or she proceeds in the work, to think methodically and in an evenly-balanced manner.

The old-fashioned objections to the study of science on account of its technical nomenclature are fast dying out. A little Latin, and less Greek, is all that is required for the appreciation of scientific names; and even with a total want of classical training, a student can, by practical study, speedily acquire a complete and lasting knowledge of scientific terms. But science consists not of hard names merely, as some persons appear to think. There is, beyond the mere method of study, the exact and valuable knowledge of Nature which it is calculated to convey. Professor Huxley has remarked that Peter Bell, of Wordsworthian celebrity, would not have thought anything more of the primrose, even if a botanist had told him it has a monosepalous calyx, a monopetalous corolla, epipetalous stamens, and a syncarpous pistil. But to know such details is not the ultimate end of botanical science. On the contrary, you are led to see beauty and design in every part of the flower; and from the careful study of even a primrose you may be led by diverse ways and means to questions closely connected with some of the great problems of the day—problems these, touching man's nature and origin, in which young and old are alike concerned. Carlyle, who, of all men, is the least likely to praise an unworthy object, says somewhere,—"It has been one of my chief regrets, that no schoolmaster of mine had a knowledge of natural history, at least so far as to have taught me the grasses that grow by the wayside, or the little winged and wingless messengers that are continually meeting me with a message that I am unable to answer as things are. Why did not some one teach me the constellations or the history of the heavens, that are always overhead?"

The regret of Carlyle must also be that of very many persons who are unable, from a want of early training, to understand the why and wherefore of the universe; and I therefore ask all of my hearers who have an interest in the advancement of culture, to assist the further growth of science in the Dollar Academy. You will not find the science-teacher unreasonable in his demands. Give him but a tithe of the time devoted to the ordinary branches of education, and I will answer for it he will be well content. If the advance of education foreshadows any one thing more than another, it is that those who either oppose or neglect science will soon find themselves lagging behind in the order of the day. In days like these, when every workman has, and when many seize, the chance of scientific instruction, it behooves the educationist to bethink himself of securing the aid of science in the work of training the young. For I make bold to say that, ten years hence, a school without

science will represent the condition of a certain primitive village which I have "in my mind's eye," wherein a six days' old newspaper is thought to contain the very latest news, and wherein the oldest inhabitant declares that no event of public importance has occurred since the battle of Waterloo.

A TALE OF SCHOOL DISCIPLINE.

JOHN R. DENNIS.

THE academy at Copper Furnace had long been closed. It was an old two-story brick structure standing back from the street far enough to give the boys a good play-ground in front, and bore the marks of many a rude assault as though somewhat of a fortress. Learning in past days has been considered to be a good only attainable by long and severe labor; it was the product of toil and not of pleasure. The boys of the town seemed to take delight in dashing out the panes of glass in the two windows that faced the street, and in other ways rendering the academy unpresentable and uninhabitable. But the news flew round, one day, that a school was to be opened, after all. The new clergyman had procured a young man, a graduate of Williams College, to take charge of it, and the first of September was fixed upon for the opening day.

A fine physical form was possessed by Philip Young. He was no ordinary man, that was easily to be seen. He possessed that individualized character that assured you that purposes were formed entire in his mind, and sprung out full-fledged. He was a severe student, and soon had his pupils hard at work. Latin grammars were drawn from their recesses and Virgils purchased; the algebras and geometries were reopened.

Copper Furnace had a new excitement. The chief man of the town, the owner, in fact, of the furnace, and President of the Board of Trustees of the academy, was the father of a rude and demoralized son of the age of sixteen. Peter Nickerson had refused to stay after school and get his neglected lesson! He had crawled, instead, out of the window and skulked off home. He had told his mother that the master intended to keep him in until nine o'clock at night as he did Samuel Parish last week, and he could not stand it, he did not feel well at all; and then having devoured a large piece of pie, he went out to play ball until supper time. The news traveled quickly around the town, that the master had been seen to go to "Nickerson's store," which served both as office and store, that he had a long interview with the proprietor, that he had come out of the store with a resolute yet pleased expression of countenance.

"Pete, you'll get a licking to-morrow," said the shrewd schoolmate, who had been drawing conclusions from the premises presented. "Your dad's told him to wollop you like thunder."

"How do you know," said Pete, whose face exhibited signs of fear that the news was true.

"'Cause the teacher came smiling as a basket of chips out of your father's store, and that means he told him to lay it on to you and make you learn your lessons."

"Like to see him do it."

"No you wouldn't, you'd cry like a baby."

Pete had no comfort in listening to the various suggestions and opinions offered by the knot of schoolmates on the village green, so he betook himself homeward, to rehearse the matter to his mother. At the supper table the elder Nickerson had only eaten one mouthful of hot biscuit when the mother began:

"Father, Peter says Mr. Young is going to whip him for leaving school to-night. He wasn't well and the lessons are too hard."

"Stuff and nonsense. He is lazy and wants to shirk. I've told Mr. Young to make him toe the mark, and I guess he will, too. If he don't he shan't teach in that school another day."

From this decision there was no appeal, and so with a heavy heart Peter ascended the steps of the old academy the next morning.

The teacher had his anxieties and perplexities also. If he should do the wrong thing it would certainly injure his influence, and just what was the wise course he did not know. The old-fashioned idea of asserting authority, said, "After prayers call up that boy and flog him soundly, and end off by a sound lecture to the rest." The advice of instinctive tact, said, "Wait awhile, take him by surprise, keep yourself hidden from him in a mystery; do not let him feel you have any doubt of yourself or of his yielding; you may not need to punish with the rod at all; you can command him without it." The idea of corporal punishment was distasteful enough to one who was so highly civilized as this young collegian. He delighted in science and knowledge, and the supremacy they give. He determined not to strike a blow if possible, bad as the elements were with which he had to deal.

The day passed off without any incident. There was a constant expectancy, but all saw that the teacher was not troubled, and therefore came to the conclusion that he knew his way and was in no perplexity about the first case of disobedience of orders. When the time came for dismissal at night, the culprit began to feel uneasy. The names were read of those who were to stay for "aid in their lessons," for "coming late," for "imperfect lessons," and finally "those who did not stay to pick up lessons yesterday." Then, Mr. Young called the pupils of the first class to stand, by ringing the bell, and then dismissed them. This plan he had drilled them upon during the forenoon, so that it was understood and well carried out; the classes passed in front of his desk in review. Next he called up the second class. Now in this class Peter Nickerson was enrolled, and, as expected, he rose with the rest hoping to escape observation. The teacher said nothing until the class in motion had brought Peter in front of his desk. He then called out "Halt." Then the line stopped.

"There is something wrong about this class; I cannot dismiss it until it is made right; face about; march to your seats.

The class having regained their seats, Mr. Young said: "I will try the class once more; if the error is not corrected I shall return the class to their seats, and dismiss the other classes."

The bell struck again, again the class arose, moved forward, and again with a displeased and stern voice were remanded to their seats. By this time the whole class knew that they were detained because Peter Nickerson was trying to repeat his yesterday's trick, and they scowled at him for bringing delay upon them. After a moment's pause the other

classes were dismissed, and then the teacher said: "I will try this class again in a few minutes." Peter was not so dull but he perceived that he was rendering himself extremely disagreeable to his companions (whose good-will at this juncture he coveted) by attempting to evade the command of the teacher. So, as the bell rung for their rising the third time he remained in his seat determined to meet his fate like a man. A glance told this fact to the teacher; he said, "You are right now," and dismissed them from the room. After the silence of a few moments the teacher said, "Those who have lessons to prepare may begin at once, so as to make their stay short."

Peter Nickerson recited his lesson with considerable readiness, and then the teacher in the presence of two or three of his best pupils kindly admonished him; told him he could do well; had talents; that he had not only lost time and opportunities by leaving as he had done the previous night, but that he had lost the good opinion of his school-mates (this the teacher had found was a tender point), and, finally, that he would soon get the reputation of being a bad boy, which he knew at heart he did not intend to be.

This judicious treatment had a powerful effect upon Peter. He left the school-room respecting himself and his teacher.

Mr. Young then asked the pupils present to exert their personal influence upon the lad to interest him in the school. In the course of a few weeks he became an earnest and faithful scholar, and rose in life to a station of usefulness and honor.

N. Y. School Journal.

PHYSIOLOGY IN OUR COMMON SCHOOLS.

CHAS. N. COOPER, M. D.

MANY of the recent state gatherings of our educators have been ususually full of interest and profit. Physical culture, normal schools, compulsory education, and other topics of equal importance, received the attention they deserve. So far as I can learn, nothing was done toward the introduction of physiology into our schools. In those states which have placed this among their text-books comparatively little attention is paid to its study. Probably not one in ten of our public school teachers has ever learned more than the alphabet, if even that, of this important branch of science. I have grave doubts as to whether this ratio of our academy and college professors taken together have very lucid ideas of how wonderfully they are made, or what are the functions of many of the organs of the body. The study of all the natural sciences is interesting to most minds, but to me there is none more pleasing than that of physiology.

A week spent in the study of the ear is not time lost if it give a clear conception of the beautiful apparatus through which the brain is able to perceive and distinguish sounds. However high the note or low, however soft or loud the tone, whatever the modulations of the voice, the normal healthy ear is always a trusty medium of communication to the brain. The position of the eye, its means of protection, its wonderful internal construction, so delicate yet so perfect, and in every way adapted to that for which it was designed, all clearly indicate that One wiser than man planned it, and that a more cunning workman than man made it.

Throughout the body we see the highest degree of wisdom and skill manifested. There is perfect adaptation of every part to its functions. Notwithstanding all this, the majority of the people of our enlightened land in this advanced age are as ignorant of their own bodies as of the great Corliss engine which was at once the wonder and admiration of all beholders at our late Exposition. They knew it was supplied with water and fuel, that in the consumption of these steam was generated, that power was conveyed in some way throughout that vast hall which caused every connected piece of machinery to move as by life or magic. They knew that as long as the engine was fed and worked properly and all the connections were perfect, there was perfect action, but so soon as this central power ceased to impart its apparent life-force, every machine was silent and powerless. As to their bodies, they eat and drink, and know that in some way a certain life-fluid is generated, that this is forced to all parts of the body, giving vitality and power of action. They know that as long as this life-force is generated, conveyed and properly appropriated, there is life and health, but so soon as the heart ceases to throb, there is death-silence in all members. This is all they seem to know or care about it. Yet there is no invention of man, however beautiful and intricate in design, however perfect in construction or complete in action, that will bear comparison with the human body. To-day we admire a splendid machine which shows a wonderful breadth of mind and grasp of thought in its designer. We call it perfect. Within two years, or three at most, it will be so much improved as to require a new patent. He who fashioned the human body pronounced the work good, and during these thousands of years no improvement has been found necessary or possible.

The farmer who buys a new machine deems it necessary to understand all its

workings, how he must use it to get the greatest profit from it, and how he may best preserve it from wear, rust and decay. He is careful to conform to all the rules laid down to accomplish these ends. All this time his body is suffering from neglect and ignorance. When he should be at the summit of life he finds himself half way down the western slope, or perhaps just entering the valley, or what is worse, that he has outlived his usefulness. He looks back now with regret and says, "If I had only known." Through ignorance of the laws of his being he has lost years of mature judgment and hard-earned knowledge, in which he might have accomplished so much for himself, his family and the world. What an army of women, who have scarce reached their score and ten, are to-day reaping a painful harvest of ignorance and indiscretion. Nature's laws may seem flexible for a time and be triflingly set aside, but we may not break them with impunity. The penalty may be delayed, but if so it will come with added rigor. A broken down human body is not easily renovated. You may patch it with drugs and elixirs, or brace it with artificial stimulants, yet it is old, whatever the number of its years, and you can not rejuvenate it.

I would not speak a word against anything now in the curriculum of the common schools, but plead that physiology may have its proper place there. Encourage the girls to cultivate their taste for music and art as thoroughly as they may wish or be able, but do not send them from the home roof where a mother's experience, sad it may be, compensates a little for their ignorance, till they have learned some of the laws of their being and the necessity of keeping them inviolate. There is no reason why our children must grow up and go out into the world utterly ignorant of the different organs of their bodies, and the work they are meant to perform. Any school boy will tell you why the Missisippi river runs south instead of north, but few college seniors can say why the head may not long retain the dependent position as well as the feet. The average scholar may tell you how long it takes light to come from the sun to the earth, but his teacher is beyond the average if he knows how long it takes the blood to pass from his hand to his foot. The backwoods boy, ignorant of letters, will tell you at once whether the stick you pick up grew in a maple tree or an ash, but the most advanced scholar in school will be puzzled to say whether the rib you show him is the bone of a sheep or a man, and his teacher will be quite as slow to inform you whether that vertebra belonged originally to a horse or a human being.

It is as much the aim of every true physician to prevent disease as to cure it. The prevailing ignorance of the masses with reference to physiological laws and the demands of the human system, greatly cripple his efforts in this direction. Many people reject the advice of an educated physician for the loud-sounding phrases of a brazen-faced but ignorant charlatan. Not long ago, one of these in the guise of an oculist wisely informed a patient that he was suffering from cataract of the *os calcis*. The merest tyro in physiology would have know that article to be located in the heel and not in the eye, yet the best surgeon in the county could not convince the man that the oculist was a rogue. Physiology is second to none of the higher branches now taught in our common schools, and I am persuaded that its careful study would greatly tend to lessen disease and consequent misery. Let me urge upon the educators of our land a careful consideration of this subject.—*Nat. Teachers Monthly.*

EDUCATIONAL SENTIMENT.*

Mothers and teachers sow nearly all the good and the evil that develop themselves in the world; it is then, through families and schools that we must commence all educational reform.—*Dr. Rush.*

THE universal ignorance which, with a small number of honorable exceptions, prevails concerning the importance, the end and the means of education, is extremely prejudicial to the dearest interests of society. In order to apply a remedy sufficiently prompt and energetic, it is necessary that public opinion should be enlightened on this point. It is the duty of a wise and paternal government, to take charge of and maintain a system of education, and render it obligatory upon all classes of society, as the only safeguard of morality and of the liberties of the people. A sovereign becomes the father of his people only when he confers upon them the benefits of an education. Governments ought by all means in their power to inspire in men the love of order and self-perfection, to make them

*Translated from the *Journal De L'Instruction Publique* of Quebec, in which it is republished from the *Journal d' Education de Bordeaux*. Though written from a monarchical stand-point, it contains truth that should cause sober reflection.—ED.

fully understand their rights and duties, to awaken in them the sentiment of paternal responsibility and obligation, to offer them useful suggestions upon domestic education, excite and satisfy their desire for instruction, propagate the best methods of teaching, elevate the condition and consequently the character of teachers; in a word, they ought to spread abroad in all minds a profound conviction of the extreme importance of education, and offer to all classes, the lowest as well as the highest, the means of securing its benefits, in conformity with their respective conditions in society. The State cannot shift to the shoulders of individuals its own duties in the matter of education with any more propriety than it can its duties respecting other matters of great public interest.

It is necessary, however, to create in the masses a sentiment favorable to education, before the government can act with much chance of success; for legislative enactments are always a dead-letter when not sustained by public opinion. To create a public sentiment favorable to education, we must organize everywhere associations composed of the wisest and best men in every neighborhood, and the conductors of the press and enlightened philanthropists must unite with these in a crusade against ignorance. Thus the great crusade against human slavery was carried on until the desired result was accomplished. The educaticnal reform can only be accomplished, like other great reforms, by the combined efforts of multitudes of persons working for the same end. As religion sends its missionaries in all directions to distribute publications to the masses and impart instruction to parents, as rich men consecrate their money and educated men consecate their talents to this great cause, as ministers of the Gospel make it the constant theme of their exhortations, so those who feel the benefits of education should put themselves to work in their respective localities, and address themselves to fathers and mothers through the press and from the public platform.

The spoken word would perhaps be more efficacious than the printed page in combatting ignorance and removing the apathy of parents respecting education. This is why the missionary of education should possess oratorical talents. Men can be found, large-hearted, eloquent, and willing to devote their energies to sustain so noble a cause. Some such persons could be employed by private associations, or by the State, to deliver courses of public lectures upon education, or this might be done by those whose duty it is to inspect schools and examine teachers. If these missionaries of education recommend themselves by their knowledge and virtue, if above all, their hearts palpitate with the desire of ameliorating the condition of their fellow-citizens and elevating their country, they will awaken the public mind to a deeper interest in education, they will enlighten the people upon its importance both to individuals and to society as a whole, they will explain the objects of education and teach parents how to perform their delicate and difficult duties.

It is also most important that young people should receive instruction calculated to fit them to become the heads of families. Every parent is a teacher, and whether his instruction is profitable or unprofitable to his child, depends very much upon how he was himself instructed. The science of education ought to be placed upon the same footing as a branch of instruction with other branches considered the most necessary. It ought to be regularly taught in schools of both sexes, in colleges and universities, as is the case now in some of the universities of Germany. It cannot indeed be dispensed with in a complete course of study.

If by the provision of an enlightened government, the science of education was generally studied and well understood, parents could educate their children before and in connection with the teacher. Their and his labors could be conjoined for the benefit of the child. Thus, the rising generation, the common object of the solicitude and combined efforts of parents and teachers, growing up under the influence of a well-directed moral and intellectual discipline and improved methods of teaching, would eventually elevate the whole nation to a higher plane of prosperity and greatness.

OZYMANDIAS

I met a traveler from an antique land,
Who said: Two vast and trunkless legs of stone
Stand in the desert. Near them on the sand,
Half sunk, a shattered visage lies, whose frown
And wrinkled lip and sneer of cold command
Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless things,
The hand that mocked them and the heart that fed.
And on the pedestal these words appear:
"My name is Ozymandias, king of kings:
Look on my works, ye Mighty, and despair!"
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare,
The lone and level sands stretch far away. *Shelley.*

FLOGGING BY PROXY.

THERE was a time when it was a fair question whether the parents of a vicious and intractable boy should apply the birch or delegate the unpleasant task to the public school teacher. That was a good while ago, when, if a boy got three months of "schooling" in twelve he was fortunate, assuming that he was the son of poor parents who could not afford to send him to a private establishment. A little schooling had to go a great way then, and the teacher was expected to hammer a good deal of elementary knowledge into the youthful brain. Children were expected to make the most of their opportunities. To expel a scholar for vicious conduct was regarded as a sort of cutting off of educational advantages, and was therefore deemed a greater evil than a pretty severe affliction of the rod or a ferule. But flogging by proxy was always a brutalizing process in its best estate, and the necessity for employing men of known severity to teach winter schools soon bred greater evils, if possible, than ignorance. It converted the public school room into a sort of training school for bad boys, and the good and the bad were pitched in together, and left to make the best of it. The best of it generally turned out to be that the vicious clung to their vices, and the tractable took on some of the vices of their enforced companionship. The use of the lash is not calculated to edify or elevate the spectators, and a bad boy who has any stuff in him can establish an order of heroism in any school where flogging by proxy is permitted. It will not be a very high order, but it will appeal to the worst side of boy nature and do a great deal of harm.

The New York Board of Education has had flogging in the public schools under consideration by committee, and two reports have been submitted. The majority report is against flogging, and states that the abolition of the rod has raised the *esprit du corps* of the schools. Every experienced teacher can testify to the tendency to betterment which follows the banishment of the rod from the school-room. True, there are bad boys who will take liberties in any case, but who sometimes become unbearable when they know that there is no rod in pickle for them. If all boys were of this stamp, flogging would not do much harm. But such boys are exceptional; and the business of training them in the presence of the school always damages the *morale* of that school. Admit that to flog or not to flog is to choose between evils, it is pretty clear to most observers that expulsion works less evil than the attempt to reduce to subjection by the use of the rod. The advocates of corporal punishment always magnify the loss of opportunity to the youth expelled. He is but one, and he is a sinner, and the interests of such boys ought not to be permitted to work injury to the interests of youths who do not need corporal punishment.

But the minority of the committee came to the conclusion that the good old-fashioned way is the best way; and that to avoid the loss of opportunity to the vicious, the parent should be privileged to delegate the business of flogging to the public teacher. Some teachers may agree in this opinion, but not many; for our teachers are, as a class, averse to the business. A few may not be, and those possible few are just the persons to whom such business ought not to be delegated. No man or woman who takes pleasure in using the rod is fit to be entrusted with the rod. No parent who likes to punish, corporeally, his own children, is fit to have children to train. Nothing touches a bad child so nearly as the knowledge that the father or mother suffers pain when compelled to use violent modes of correction. Some people may know this from experience, and to such it is not necessary to say more. If there are parents who have not time to train their children, the best way is to have a public trainer appointed by the courts and turn the children of such people over to him. But it is not fair to convert our public schools into reformatories. *North American.*

METHODS OF TEACHING.

THE ALPHABET.

THE words phonetic and alphabetic methods have their respective advocates; and it is dangerous ground for one to write anything against those most recently introduced. Many educators regard it as most unfortunate for a child to know the alphabetic before the word method. But, somehow, in most intelligent New England families, children learn the alphabet before they ever enter the school-room.

In graded schools in our larger towns, the word method has its decided advantages over that of any other yet invented. The child attends the same school, and

under the same teacher, for a number of terms, and the plan reaches a good result. In rural districts, when schools are short and teachers change, the alphabetic method, when properly taught, undoubtedly has its advantages. It is not pleasant, as I have witnessed in several instances, for a parent to learn, at the close of a term, that his child does not know a single letter.

It seems to me that the word method has been too often carried to an extreme. I can see no reason why the alphabet may not be introduced at a very early period. If properly taught, children will very soon learn the power of the letters which compose the English alphabet. It is not readily done by the old stupid way of making a child repeat the alphabet, from *a* to *ampersand*, three or four times a day, until it is committed to memory as a mere abstraction.

I will present some of the methods I have seen employed by successful teachers.

1. Select one letter—*o* for example. Point it out to them in different places, and let them repeat it; then print it on the board. Let them find it for themselves. This is sufficient for the first lesson. Next, point out the letters *t*, *a*, and *c*, until they can recall each letter at sight. Then print on the board *c-a-t*, and let them repeat it till they can recall the word. Next take dog, rat, and other short, familiar words; and in a short time they will learn the power of the letters, and be able to apply them in new combinations. We can never know the mental processes going on in the child's mind by which he acquires this power. It is there, and that is sufficient. In this way the alphabet will be learned as fast as it is needed. By this method the alphabet does not become a mere abstraction. The word method by the chart can be combined with this exercise.

2. Where there are (as it is usually the case in rural districts) only a small number of children unacquainted with the alphabet, hire them to learn the alphabet at home with the promise of a cent. In many a rural home such children will be taught for the sake of a cent, and the coveted prize will be secured in a few days.

3. Take a well-printed newspaper, and point out the letter *o*, and make them pronounce it, and then let them find the letter elsewhere on the paper. Then give each one a pin and let them pick through all the *o*'s they can find. Children will amuse themselves by the half-hour in this way, and by taking one letter at a time, they will literally pinhole a paper in pieces. This is called the *pin-cushion* method.

4. Let the little ones take your knife and point out all the letters they can find; this will please them.

5. Have a card with the alphabet on it, and teach them certain letters at a time, and combine them in words, as *c-a-t*, *cat* Now have a box full of letters and words. Let them find the word cat, and pin it to the board, and make them read it there. A picture of a cat by the side of the word would aid the pupil.

6. Make them point out in the book all the letters and words they know, and make them feel how nice it is.

7. Do but little at a time, but do it well.

8. Keep a sharp review of what they have learned at each exercise.

9. See if they can count the letters in the word cat.

10. Show the picture of a cat, then the word cat, then the elements c-a-t.

11. Remember to impress on the child that every letter stands for a sound, and that the letter should be seen, heard, and repeated again and again, till the letter and the sound are associated.

12. As pupils advance in their work of reading and spelling words, let them repeat and spell all the words they can recall. This serves as an admirable review.

The ingenious teacher will devise various measures by which to secure the attention of young children. They cannot all be written out, but if teachers in primary schools would communicate to the *Journal* any successful methods of their own, it would be of great value. To all teachers, the best methods are of the highest degree of importance.—*N. E. Jour. of Education.*

AMERICAN PUBLIC EDUCATION.

J. G. HOLLAND.

IT is safe, at least, to make the proposition that public schools are a curse to all the youth whom they unfit for their proper place in the world. It is the favorite theory of teachers that every man can make himself anything that he really chooses to make. They resort to this theory to rouse the ambition of their more sluggish pupils, and thus get more study out of them. I have known entire schools instructed to aim at the highest places in society, and the most exalted offices of life. I have known enthusiastic old fools who made it their principal business to go from school to school and talk such stuff to the pupils as would tend to unfit every one of humble circumstances and slender possibilities for the life that lay before him. The fact is persistently ignored in many of these schools, established emphatically for the education of the people, that the majority of the places in this world are subordinate and low places. Every boy and girl is taught to be "something" in the world, which would be very well if being "something" were being what God intended they should be; but when being "something" involves the transformation of what God intended should be a respectable shoemaker into a very indifferent and a very slow minister of the Gospel, the harmful and even the ridiculous character of the instruction becomes apparent. If we go into

a school exhibition, our ears are deafened by declamations addressed to ambition. The boys have sought out from literature every stirring appeal to effort, and every extravagant promise of reward. The compositions of the girls are of the same general tone. We hear of "infinite yearning" from the lips of girls who do not know enough to make a pudding, and of being polished "after the similitude of a palace" from those who do not comprehend the commonest duties of life.

Now, I believe that a school, in order to be a good one, should be one that will fit men and women, in the best way, for the humble positions that the great mass of them must necessarily occupy in life. It is not necessary that boys and girls be taught any less than they are taught now. They should receive more practical knowledge than they do now, without a doubt, and less of that which is simply ornamental; but they cannot know too much. I do not care how much knowledge a man may have acquired in school, that school has been a curse to him if its influence has been to make him unhappy in his place, and to fill him with futile ambitions.

There must be something radically wrong in our educational system, when youth are generally unfitted for the station which they are to occupy, or are forced into professions for which they have no natural fitness. The truth is, that the stuff talked to boys and girls alike, about "aiming high," and the assurance given them indiscriminately that they can be anything that they choose to become, are essential nuisances. Our children all go to public schools; they are all taught these things; they all go out into the world with high notions, and find it impossible to content themselves with their lot. They hoped to realize in life that which had been promised them in school; but all their dreams have faded, and left them disappointed and unhappy. They envy those whom they have been taught to consider above them, and learn to count their own lives a failure. What we greatly need in this country is the inculcation of soberer views of life. Boys and girls are bred to discontent. Everybody is after a high place, and nearly everybody fails to get one; and, failing, loses heart, temper, and content. The multitude dress beyond their means, and live beyond their necessities, to keep up a show of being what they are not. Humble employments are held in contempt, and humble powers are everywhere making high employments contemptible. Our children need to be educated to fill, in Christian humility, the subordinate offices of life which they must fill, and taught to respect humble callings, and to beautify and glorify them by lives of contented and of glad industry.

When our public schools accomplish an end so desirable as this, they will fulfill their mission—and they will not before. I seriously doubt whether one school in a hundred, public or private, comprehends its duty in this particular. They fail to inculcate the idea that the majority of the offices of life are humble; that the powers of the majority of the youth which they contain have relation to these offices; that no man is respectable when he is out of his place; and that half of the unhappiness of the world grows out of the fact that, from distorted views of life, men are in places where they do not belong. Let us have this altogether reformed.

WILLIAM CULLEN BRYANT made an address to the Sunday-school in Cummington—an informal fatherly talk, no less enjoyed by his older hearers than by the little ones, for whom it was specially intended. It was substantially as follows:

My young friends, I am not much accustomed to addressing young people like you, but I hope to be understood. The poet Collins said he had but one book, and that the best one,—it was the Bible. In the New Testament you will find all the rules you need to guide you in the paths of virtue; follow them, and you will be in sympathy with Christ. I have visited the place where Christ spent most of his youthful days; the scenery was delightful. The fig trees were just putting forth their beauties, the flowers were in bloom; among them was the cyclamen with its nodding blossoms, and the hyacinth with its blue bells. I could but imagine that Jesus must have picked such flowers with His little hands when He was a child. He evidently sought every opportunity to store His mind with knowledge. (Just here Mr. Bryant told in touching language the story of Christ's going to Jerusalem with His parents when but twelve years old, and His wonderful answer to His mother's tender inquiries when she found Him among the doctors, "Wist ye not that I must be about my father's business?") He lived in the utmost harmony with His mother's family, and was obedient to all their wishes. He worked at the carpenter's trade with His father, and made honest and faithful work. When at your age He was gathering up truths, as I hope you will do in the Sabbath-school and when you read the Testament. They had no Sabbath-schools in His days. You have heard some good sermons from this desk, but never such a sermon as Christ delivered upon the mount, which surpasses all other sermons. Jesus never uttered a falsehood, He never quarreled with His associates, He never disobeyed His parents, He tried to impart to others the good He possessed. I hope you will follow His example.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, DECEMBER, 1877.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

SPECIAL NOTICE.

A SPECIAL meeting of the Department of Superintendence, National Educational Association, will be held in the lecture room of the Congregational church, Washington, D. C., commencing on Tuesday, December 11th, and continuing two or three days.

Important business will be transacted concerning measures for strengthening the National Bureau of Education, the establishment of a National Educational Museum; the proper representation of the educational interests of the country at the Paris Exposition, the appropriation of the proceeds of the public lands to school purposes, and others equally important.

Papers are expected to be read by Hon. John Eaton, United States Commissioner of Education; President J. G. Runkle, of Massachusetts; Hon. William H. Ruffner, of Virginia; Hon. Jas. H. Smart, of Indiana; Hon. Hugh S. Thompson, of South Carolina, and others. Leading officers of the Government and Members of Congress interested in education, have been invited to take part in the deliberations of the Department.

No more important educational meeting has ever been called together in the United States, and it is hoped that every State in the Union will be represented by its leading school officers. A full programme of exercises will be issued as soon as it can be prepared.

The rates of boarding at the Ebbitt House, to Members of Department, will be $2.50 per day. J. P. WICKERSHAM, *President.*

THE attention of Superintendents of schools throughout the State is invited to the notice above given. Pennsylvania should be well represented. The meeting is not called for the purpose of hearing lectures or addresses upon topics of little practical importance, or for the purpose of enjoying a literary or musical entertainment, but with the object of representing to the national authorities the views of the educators of the country upon questions that deeply concern its welfare. Those having the matter in charge "mean business," and they are earnest in their call for a council of those having charge of educational affairs in all sections of the country. Let the assembly be a strong, working body of school officers—a *Congress* that will give weight to whatever action it may take.

J. S. FREEMAN has been commissioned Superintendent of schools, Pike county, in place of John Layton, resigned. His post-office address is Milford.

W. P. SCHARF has been commissioned Superintendent of schools, Snyder county, in place of William Noetling, resigned. His post-office address is Selinsgrove.

ALONG with other improvements recently made at the University of Pennsylvania, it is now proposed to adopt in the technical department the Russian method of shop instruction. This admirable method was finely exemplified at the Centennial Exposition.

THE five new buildings erected in the Girard College grounds are approaching completion. When ready for occupancy, it is proposed to admit five hundred additional students, making over a thousand in all. The duties of the President becoming too onerous, a Vice President has recently been elected to relieve him.

THE list of questions on the science of teaching given to the graduating classes at the last examinations at our State Normal Schools, and published some months ago in THE JOURNAL, have attracted considerable attention. Answers to them have been prepared by a number of leading teachers in several different states. The last ones we saw published were in the *Pacific School and Home Journal*, California. Our own teachers could not do better, either individually or at their institutes, than to take them up, one by one, and give them thorough examination. Any teacher who can answer them all is worthy of a State certificate.

THE EDUCATIONAL TIMES, of London, England, in its issue for November 1st, publishes a lengthy article on "Industrial Schools in Germany." The article is word for word an extract from the Pennsylvania

school report for 1876, and in great part a translation therein made of M. Buisson's report on education at the Vienna Exposition. This extract has been printed in so many magazines and periodicals—has strayed so far from home—that it has lost its parentage. No matter, so that it continues to do good on both sides of the water.

A CIRCULAR of the State Normal School at Edinboro makes the following statement:

1. A library of works upon teaching has been secured.

2. Cabinets of specimens to illustrate the natural sciences are placed within daily access of the students.

3. A large amount of apparatus for explaining the subjects taught in common schools is within reach of all student teachers.

4. We have just received from the educational Depository at Toronto, several hundred charts, models, pictures, etc., to form the basis of an educational museum.

THE *Educational Weekly*, Chicago, speaking of the next meeting of the National Educational Association, says:

While referring to this subject we venture to express the hope that the next meeting of the Association will be held at Philadelphia. The reasons for the choice are numerous and strong, prominent among which is the assurance of responsible men in the Keystone State that at least one thousand will be added to its membership in case Philadelphia be selected. Such an increase of members would place the finances of the Association on a solid foundation, and enable it to carry forward its great work without embarrassment. Again, the Association was organized in Philadelphia in 1857, and it will attain its majority next year. Its meetings never having yet been held twice in one place, there would seem to be a peculiar propriety in going back to Philadelphia before repeating a session at St. Louis or any other point. We vote for Philadelphia.

DRAWING attracts more and more attention in the public schools. Among teachers of this branch, Mr. Charles M. Carter, of the Massachusetts Normal Art School of Boston, has a deservedly high reputation. He had charge of the department of Industrial Drawing at the recent Special Session of the West Chester Normal School, and is strongly recommended for ability to present his subject in practical shape before institutes.

THE School Board of London is struggling with the question of secondary education. So far none but elementary schools have been established, but as in this country the tendency is to press upward, and these lower schools have created a necessity and a demand for higher ones. A warm discussion took place on the subject in the London Board, at the meeting on October 3d, and in reading a report of it in the *Educational Times* we were forciby reminded of the arguments formerly used against the Grammar and High Schools of our own cities, happily no longer of much weight. Although strongly opposed, the friends of higher education in the London Board succeeded in passing a resolution instructing the Committee on School Management to prepare and submit a memorial to the Government urging the desirability of establishing a secondary school or schools in each of the School Board divisions of the city, for the free admission of such scholars of the elementary schools as shall have passed a fitting preliminary examination.

We may add that we are very much surprised to see *The Times* take a stand editorially against free secondary schools. The educational journals of this country lead public sentiment.

WE have received, bound in one volume, the Eighth and Ninth Annual Reports of the Superintendent of Public Schools of the city of Pittsburgh for the years ending September 1, 1876, and September 1, 1877. They contain a large amount of valuable statistics showing the past growth and present condition of the public schools. The population of Pittsburgh is now estimated to be 135,000, and the value of its real and personal property $170,000,000. There are 52 school buildings, which, with furniture, are valued at $1,910,000. Pittsburgh employs 438 teachers, and the number of pupils admitted into the schools during the year 1877 was 22,280. The average monthly enrollment was 17,918, and the average daily attendance 15,057. The expenditures were $536,716.77. The cost per pupil estimated on the number admitted was $15.70. Pittsburgh has a very efficient system of Evening Schools and Industrial Evening Schools. It appears from a statement compiled for the report that there are in the city 45 private schools with 11,000 pupils and 212 teachers. This includes all grades of schools from the University down to the Kindergarten. Of the 11,000 pupils, 8,233 are in the Catholic Parochial Schools, and 1,423 in the Protestant Parochial Schools. These numbers surprise us. We had not supposed that one-third of all the children of Pittsburgh were in attendance at private schools. Quite likely many of them also at times attend public schools.

We have many times in these columns commended the efficiency of the management of the Pittsburgh public schools. The growth of the system has been wonderful. Its fruit as shown at the Philadelphia Exposition is unexcelled by that of any system of schools in the country.

ONE of the brightest and most suggestive Institute instructors in the work this season is Miss Lelia E. Patridge, of Philadelphia. Her versatility renders her a very valuable addition to the working force of institute week, being ready at call for good platform talks on any one of a half-dozen practical topics, for a reading or recitation when interest flags in the ordinary programme, or for a lecture or two in the evening, if such be desired. Few available instructors can do work equally good in so many directions, and we know of none who are able to do it more acceptably than Miss Patridge. As County Superintendent Shaub has remarked to us, "She should never be without engagements during the institute season." Of her lecture, "We Girls," recently delivered before the Lancaster County Institute, Mr. H. W. Gilbert—to whom, by the way, we are indebted for an article on "The Struggle in Italy," in this number of *The Journal*—one of the most discriminating critics of our acquaintance, says in the local press:

"Miss Patridge's subject was the education of girls, which she justly regards as superficial, calculated only to render them helpless when they come to encounter the realities of life,—and consequently a cruel deception. With a little revision the lecture might be placed above criticism, but even in its present form, it is one of the most useful addresses we have ever heard on such an occasion, and we are fully convinced that County Superintendents cannot do better than to secure Miss Patridge's services. We will only add that her manner is so pleasing as to render the thought acceptable, even to people fastidious in such matters."

WE learn from a circular issued by the management that "The Pennsylvania Museum and School of Industrial Art having completed in Memorial Hall, the arrangement of the collections of master-pieces of Art workmanship purchased with the means provided by the original subscribers to the fund for that purpose, is now desirous of putting into operation the Educational Department of the plan as soon as means permit." For the purpose named the intention is to establish in some central part of the city classes of instruction in the scientific elements and general principles of art applied to manufactures. These classes will of course have access to the collections in Memorial Hall, now occupying the spaces devoted to the exhibition of paintings and sculpture during the Centennial Exposition.

This plan strikes us very favorably. The distance from the central part of the city to Memorial Hall may occasion some difficulty but not one that cannot be overcome. We have spent a good many hours on a number of occasions in examining the collections now on exhibition in Memorial Hall, and we are free to say that they have been selected with great care, and cover a large variety of subjects. In the hands of a master their value to students of art would be very great, and we hope to see grow up in connection with them and under the patronage of the public-spirited gentlemen who have spent their time and money in collecting them a great art school, if possible, the equal of the one at South Kensington, England. Philadelphia is the greatest manufacturing city in the Union, it is famous also for its love of art, it was the seat of the great Centennial Exposition; now growing out of all these, let there be founded a great school of art that will be the centre of an influence that will widen and enrich our manufacturing industries, and elevate the taste of our people, spreading more and more widely a keener appreciation of and a truer love for the beautiful.

AN International Medical Congress was held at Philadelphia, September, 1877. Before this Congress, Clarence J. Blake, M. D., Instructor in Otology in Harvard University, read a valuable paper "On the Best Mode of Testing the Hearing of School Children, and of Providing for the Instruction of Partially Deaf Children." The conclusions drawn by Dr. Blake from the study of the subject are as follows:

1. The frequency of partial deafness in children, during the period of school life, renders it advisable to make some definite provision in our public schools system for compensatory instruction.

2. Since partial deafness is a comparative term, some provision should be made for a proper determination of the degree of disability.

3. This may be best accomplished either by establishing a series of speech tests, to be used by the teachers, or by instituting competent medical examination at the hands of a medical supervisor of schools; and the creation of such an office in connection with our public school system is strongly urged.

4. Partially deaf children, whose hearing is not so defective as to require special instruction in articulation and lip-reading, are better taught in mixed classes with those who hear well, compensatory advantages being allowed them according to their degree of disability.

5. Partially deaf children, whose hearing is so defective as to interfere with the natural acquirement of articulation, and to render the ear of little or no value as a medium for hearing, should be accorded advantages of special instruction, of which education in articulation and lip-reading should form a part.

THE New England *Journal of Education* has the following concerning the educational affairs of Lewistown, in this State:

Lewistown Academy, at Lewistown, Pa., in the beautiful valley of the "Blue Juniata," was founded in 1814. Among its teachers there have been such men as Gen. A. T. Warner, of Ohio, and Washington McCartney, afterwards professor in Lafayette College, and author of a celebrated work on "Differential Calculus." Among its former students now occupying responsible positions are Bishop L. W, Wiley, of the M. E. Church, at present on a mission to China and Japan; ex-Judge James B. Belford, member of Congress from Colorado; and General Mitchell, General Hancock's Chief of Staff. The academy has been recently repaired and enlarged, by the addition of a boarding-hall, and began its sixty-fourth year Sep. 5, with revised graduating courses of study, for both sexes, and a new principal,—W. H. Schuyler, A. M., a graduate of Lafayette, and for three years a tutor in that college. He is assisted by four competent teachers, A high grade of scholarship is aimed at in each department, and special attention given to preparation for college. A reunion of the old students, next June, has been proposed, and will probably be held. Lewistown has also been making great progress recently in her public schools. A fine building was erected about four years ago, which accommodates at present more than five hundred pupils. The schools are graded, and are under the supervision of the teacher of the highest grade, Miss Mary McCord, who, by her energy and efficiency, has proved a great stumbling-block to those who hold that women are not capable of filling such positions. She is ably assisted by ten teachers, some of whom have been teaching in the town for nearly twenty-five years. The school board is aware of the greatest defect in their schools—too few teachers—and will provide more as soon as circumstances will permit.

PRESIDENT GILMAN, of the John Hopkins University, is reported to have said that one of the great laws of his ideal college is "That character is before knowledge." He is probably not alone in this fine conception. But practically the standard by which students are measured at our colleges and other institutions of learning is not found by an application of this law. Talent, acquirements, is the main factor in the common estimate which gives standing to a student. Besides, what well-directed methods of instruction or courses of training have we in our colleges and schools for forming the character of young men? The work now done is mainly addressed to the intellectual, not to the moral, nature. What new plan does President Gilman propose? Every father would prefer that his son should be manly, honorable, brave, generous, patriotic, virtuous, than that he should be skilled in languages, science or mathematics; but in what college is this kind of education made the one great end of effort? President Gilman means well; we heartily endorse his views of the matter; but we are exceedingly anxious to see what he is able to accomplish.

THE Trustees of Lehigh University have offered to pay half the salary of a competent instructor, if the town authorities of Bethlehem will add a classical course to the present curriculum of instruction in the public schools of that place. In addition to this, all scholars fitted for entrance into the University will be admitted to that institution free, and the entire four years' course given gratis.

A correspondent in Bethlehem also informs us that the public schools are in a very flourishing condition under the supervision of Mr. A. C. LaBarre.

NEXT MEETING OF NATIONAL ASSOCIATION.

THE Superintendent of Public Instruction of the State of Missouri, Hon. R. D. Shannon, publishes a lengthy article in the *American Journal of Education*, claiming that the Board of Councillors of the National Educational Association voted, at Louisville, to hold the next annual meeting at St. Louis, the last vote standing fourteen for St. Louis and nine for Philadelphia, and insisting that no "unfair" means shall now be used to change this result and take the meeting to the latter city. Now, so far as Mr. Wickersham is concerned, we desire to say that, having presented the claims of Philadelphia at Louisville and been voted down, he has since used no means whatever, fair or "unfair," to bring about a change in the expressed wishes of the Board of Councillors. It is true, however, that before he left Louisville at least four or five members of the Board, all Western or Southern men, and several of them living west of the Mississippi, came to him and regretted the vote they had given. Among them was Prof. Phelps, of Wisconsin. We take the liberty of naming Prof. Phelps, because in a late number of the *Educational Weekly*, of which he is editor, he advocates a change in the place of meeting from St. Louis to Philadelphia. If a majority of those who at

Louisville voted for St. Louis would now sign a petition in favor of Philadelphia, would our friend Shannon be satisfied? If not, would he be satisfied if *two-thirds* or *three-fourths* of the whole Board would do so? If a movement of this kind were started and carried out by the men who voted with him at Louisville without pressure being brought to bear upon them from any quarter, would he consider it "unfair?"

We suppose the meeting will be held at St. Louis. Speaking for Pennsylvania, we are willing it should be. Philadelphia gave the Association a cordial invitation to partake of her hospitality, but she did not feel hurt because it was not accepted. The invitation still stands, but certainly no "unfair" means will be used to take away any honor from the good city of St. Louis, or the noble State of Missouri.

ITEMS FROM BERKS.

IN addition to a highly complimentary resolution, Superintendent Baer was presented with an elegant gold watch by the teachers in attendance at the recent County Institute.

—The new school house at Fleetwood is a match for the one at Stouchsburg. The former was dedicated a week after the latter. The exercises were equally interesting. The school lot at Fleetwood contains two acres, and the house is a two-story brick, 42 by 50 feet. There are two rooms on each floor, the two upper ones being easily thrown together, thus making a fine hall for public exercises. The stories are thirteen feet high in the clear. The different rooms are furnished with first-class school furniture. Addresses on the day of dedication were delivered by Messrs. Scheaffer and Koch of the Keystone Normal School, Dr. Fretz of the School Board, Mr. Dumm, and others.

—The following resolutions were passed by the late Institute concerning the next meeting of the State Teachers' Association. They were offered by Prof. John S. Ermentrout, of the Normal School:

WHEREAS, The teachers of Pennsylvania, in convention assembled at Erie, Pa., during the month of August last, 1877, selected our city of Reading for their coming meeting in August, 1878; therefore be it

Resolved, That the teachers of Berks county, now in annual session, assure our fellow teachers that we will welcome them to our city and county in a spirit of genuine brotherly love, and be ready and willing to co-operate with them in all measures that may tend to promote our common interests and welfare.

Resolved, That we see in the fact above stated a just recognition of the central position which our county occupies in the field of educational labor.

Resolved, That as the time has come when the educational problems connected with the common school system of the State should receive special attention, and some of them at least be definitely solved, we earnestly enjoin upon the teachers of our State the duty of turning out *en masse*, and of preparing themselves for such action as will make the coming convention an epoch in the history of Pennsylvania.

Resolved, That it is the duty of the teachers of Berks, each and all of them, to become active members of the coming State convention by a personal attendance upon its sessions, and we now pledge ourselves, should our lives be spared, to put forth every effort to crown this convention with complete success.

—An evening school has been started in Reading for the education of young men who have not had the advantages of early training. The school-room and furniture and all the expenses of running the school are provided by an Association formed for the purpose. There are accommodations for thirty-three pupils, and every seat is occupied. The ages of the pupils are from thirteen to thirty-three. Each pupil is a member of the Association and has a partnership in the building. Officers are elected every week. On four nights of the week instruction is given in the ordinary branches of an English education, while Friday evenings are devoted to lectures and general exercises. The following is the *Times and Dispatch's* report of a lecture delivered on Friday evening, November 9th, by Cyrus T. Fox, Esq., of Reading. Mr. Fox's lecture shows the aim of the Association. Lectures are to be delivered during the winter by J. Howard Jacobs, Esq., J. T. Valentine, Esq., Henry S. Eckert, Esq., Prof. Stewart, Mayor Evans, and others.

In the address of Mr. Fox he commended the project of establishing night schools for the education of the laboring classes, and particularly of such young men as are compelled to seek employment at an early age, and are unable to complete their education in the public schools. He hoped that the present project would succeed, and that similar schools would be established in different sections of the city. He made an earnest plea for educated labor; referred to the advantages attained by a combination of brains with muscle, of thought with manual labor; reviewed the educational progress of the past century in the United States and different European countries, and referred to the excellence of the common school system in Pennsylvania, and the able management of the school affairs of the State by that distinguished educator, Hon. J. P. Wickersham. He argued that the educated mechanic or laborer need not fear the introduction of Chinese or other cheap labor into the different branches of industry in this country, as skilled and educated labor would always command a premium. In conclusion he spoke words of encouragement to the officers, teachers

and pupils. He said it was a noble undertaking for the young men who had volunteered their services in teaching the school during the winter, and he hoped that they would have the assistance and encouragement of their pupils, as well as the citizens of the northwestern section of the city, in the praiseworthy project which they had undertaken.

DOING AWAY WITH SCHOOL BOARDS.

IN a recent address, Charles Francis Adams, Jr., expressed the opinion that "education has now become such a science that there is no longer any use for the average school committee, and that it is necessary to have a staff of scientific men to stand between the school committee and the teachers." We both agree and disagree with Mr. Adams. We do not accept his views as to there being no longer any use for school committees, or school directors, as we call them in this state. Even those of "average" qualifications cannot be dispensed with without undermining the principles upon which our systems of education rest, and crippling the efficiency of the practical instruction imparted in our schools. We look upon school boards elected by the people in each school district as the great conservative force that makes our systems of public instruction strong and keeps them steady in the line marked out for them. We know that there are ignorant school directors in office. We are fully aware that our schools often suffer immensely from the narrowness and selfishness of those who levy taxes and employ teachers. We have hundreds of times groaned under the dead weight of these who were placed upon school boards expressly to check progress and to defeat measures planned in the interest of education. But with all this we are far from being ready to take the management of schools out of the hands of officers directly elected by the people, and representing their will respecting them. Indeed, the great body of the school directors in this state are men of intelligence and warm friends of public education. Many of them are always ready to make personal sacrifices to serve the schools.

But Mr. Adams is right in thinking that the time has come everywhere for the adoption of a system of supervising or inspecting schools by experts. Education has become or is fast becoming a science, and no one is capable of determining when teaching is well done, much less of teaching well himself, except a person who has made a special study of the subject. Some of the rougher work of the school-room may be done by anybody, but you might as well expect an ordinary quarryman to produce a first-class statue or a common house-painter to place on canvas a finished picture, as to look for the finer kinds of teaching from an unprofessional hand; and he is a poor man to sit in judgment upon the work of another who is not himself an expert in the same line of work. No one is qualified to examine or instruct teachers or to direct the management of a school unless he has been trained or has had successful experience as a teacher. In other words, school committees and school directors must place the professional part of the work of conducting a system of public education in the hands of professional men; or as Mr. Adams has it, "a staff of scientific men must stand between school committees and teachers." Without this arrangement every such system will be a comparative failure.

TRAINING TEACHERS IN NEW BRUNSWICK.

SOME of the best Normal Schools on this continent are in the Dominion of Canada, and every now and then a new one is established. Quite recently one was opened at Fredericton, New Brunswick; and in order to show the aim and character of Normal School work among our neighbors and kinsmen outside of the United States, we insert below the remarks made the occasion by Dr. Rand, Superintendent of Public Instruction:

The theory upon which this institution has been established and is to be conducted is that every person has more or less of the talent requisite in the teacher. All are born with the same order of faculties. No sound mind is wholly destitute of reason, judgment, memory, imagination, association. Firmness, decision, the power to stimulate and command, are vouchsafed in some degree to every individual, and each of these powers is susceptible of cultivation. That which is weak, may, by a judicious course of exercise, be developed and made comparatively strong. Whatever may be regarded as the necessary natural endowments of a teacher must exist to some extent in all persons. By a proper system of special training, these natural endowments will be strengthened and the individual made capable of more acceptable service than would otherwise be at all possible. Some, indeed, there are who can never be made successful in this calling, and the same will hold true in regard to all professions and occupations. Henceforth in this institution only those students who, in the judgment of the faculty of instructors, give satisfactory evidence of possessing at least fair professional

ability, will be admitted to examinations for license. It is sometimes claimed that a thorough knowledge of the subjects to be taught is all that is necessary for successful teaching. But observation, reason and experience alike concur in refuting this assumption. That a teacher should thoroughly know the subject he professes to teach, is of course admitted; but the question at issue is to be decided, it should be remembered, by considerations lying on the pupil's side of it. The process of thinking, by which the pupil learns, is essentially his own. The teacher can but stimulate and direct, he cannot supersede it. He cannot do the thinking necessary to gain the desired result for his pupil. The problem which he has to solve, therefore, is how to get his pupil to learn: and it is evident that one acting as teacher may know the subject without knowing the best means of making his pupil know it too. He may be an adept in his subject, but a novice in the art of teaching it—an art which has principles, laws, and processes peculiar to itself. Scholarly attainments are indispensable, but a clear insight into, and a warm sympathy with, child nature; a mastery of the art of questioning; the ability to command, control and influence the young; a knowledge of the history and nature of education; of school organization and management, and of good methods of conducting the complicated operations of the school,—all these and many other things are not less important to him who would teach successfully, than good scholarship.

There are immutable principles in education, and there are methods based upon them that must be modified according to the circumstances of time, place and persons, under which they are to be applied; and did the characteristic work of this Normal School stop with the consideration of these, I should have small hope for its large success. The young teacher needs to have the theories of the class-room embodied, as perfectly as possible, in the conduct of actual schools before his very eyes; and to be *trained* by instruction, practice and criticism to a practical knowledge of principles and methods, and to their judicious application to the details of school work. The lower story of this building is equipped for model and practising schools having a consecutive course of instruction covering the first eight years of school life, and therefore affording a sufficient field for the application of the principles of management and method to the general school work of the Province. For the first time since the introduction of the present school system, and indeed, as far as I am aware, for the first time in any existing Normal School, the student-teachers will have equal facilities for observing and practising in both graded and ungraded, or miscellaneous, schools. This is a matter of great moment to the school districts throughout the Province, since about sixty-six per cent. of our school children are residents of rural districts, in which, from lack of sufficient population, the conditions for graded schools cannot be had. These increased facilities are secured by the use of adjustable school desks, so that such portions of the several grades of pupils in all the departments as the principal of the Normal schools may find necessary, may be assembled in their respective school rooms, and for any period, without difficulty or disorder.

As my experience and observation of the training of teachers increases, the more sharply do I recognize the great difference between the science of education and the art of education, and, therefore, the absolute necessity of making practising schools a very important part of the course of our student-teachers. Science tells us what a thing is and why it is. It deals, therefore, with the nature of the thing, with its relations to other things, and consequently with the laws of its being. Art derives its rules from this knowledge of the thing, and its laws of action, and says: "Do this or that with the thing in order to accomplish the end you have in view. If you act otherwise with it, you violate the laws of its being." Now the rules of art may be carried out blindly or intelligently. If blindly, the worker is a mere artisan—an operative who follows routine, whose rule is the rule-of-thumb. If intelligently, he is a true artist, who not only knows what he is doing, but why this process is right and that wrong, and who is furnished with resources suitable for guiding normal, and correcting abnormal, action. All the operations of the true artist can be justified by reference to known principles. Art and nature are not really opposed to each other. Bacon long ago pointed out the true distinction when he said: *Ars est homo additus Naturæ*—art is nature with the addition of man—art is man's work added to (not put in the place of) nature's work. This assembly hall and the class-room in the second story, primarily exist to furnish facilities for showing that all this is as true in respect of the whole field of the teacher's work, as it is in all other callings of life. But it needs the actual conditions and work of the school-room in order to give a correct and working knowledge of principles. These are supplied in this building, as I have stated, by the arrangements for model schools. In these the principal secures to the student-teachers opportunities for observing the operations there carried on, and whether they illustrate or violate the findings of his discussions of the class-room.

But while observation, for those who have eyes to see, is a good thing, and while here and there one is found able to see that at which he steadfastly looks, many more are found unable to appreciate just what all the trouble and worry they have been through in listening to or taking part in discussions of the nature of education, the nature of the child, the science and the art of teaching, and the how and why of management, was about. They cannot see but the children are right enough, always doing the right thing at the right moment, saying just what they ought to say, and very ready to learn. That is about the extent of the benefits of observation to one who has never had charge of a school. And here is where the virtue of practising schools come in. The principal requires students to take charge of these schools for short periods, at a time, and to give specified lessons in presence of himself or his associates, and groups of student-teachers. When the exercise is over, opinions of its merits are elicited from those of the students who witnessed it, and then is revealed, as with a sunbeam, the grasp of principles and facility to apply them, or the want of these.

Here are real and substantial data from which to carry on the work of training, and it is often very surprising how generally, and in some instances rapidly, a correct knowledge of principles is thus successfully lodged, and professional skill developed. These are, in brief, some of the characteristics of the work for which this institution exists, and for the more successful cultivation of which this building has been erected. Here, we trust, is to be impressed deeply upon the minds and hearts of our teachers, the truth that the object of education is the development of manhood and womanhood in harmony with the attributes with

which the all-wise Maker has endowed them. Here, we are confident, our teachers will carefully be taught that they are to do the work assigned to them in our school system, in full view of the great object of which it forms so important a part. It is a great, a noble, a blessed work,—

"No work
Of art, or finest mechanism in things
Material, hath e'er so challenged for
Its right discharge e'en the vast aggregate
Of human skill."

THE STRUGGLE IN ITALY.

WE have received the *Bolletino Ufficiale* of the Department of Public Instruction in Italy for the months of July and August, 1877, and find therein the address of Signor Coppino, the present Minister of Public Instruction, upon presenting to the Italian Chamber of Deputies his draught of a law for the enforcement of attendance in the common schools of all children not duly educated through private instruction.

Without entering upon the merits of this question in itself, we will say that the address of Signor Coppino discusses it in a masterly manner, and that while taking the broadest views thereof, he neglects none of the important minutiæ that might present themselves as obstacles to the adoption of the proposed statute, which we hope, and have no doubt will, eventually, with unimportant modifications, at least, become the law of Italy. To make it such will, we think, from what we know of the Italian nation, be a comparatively easy matter, since the Italians are predisposed to obey the law, and must be especially so when that law is enacted by representatives in the national legislature returned by themselves. There are those who believe that such a law would be ineffectual in the United States; that we have reached such a pitch of independence and insubordination, that, though the direct representatives of the people should enact a statute designed to compel attendance in the public schools, that very people would resist its enforcement. This may be so, but the contradiction between the two propositions is such that argument seems to us superfluous.

Signor Coppino opens the question by saying: "One fact is indisputable, that in the ten years preceding the present, all the ministers who have succeeded each other in the management of education, although of very different classes and opinions, some of them more and some less, some wholly and some only in part, have returned, as if pursued by an inevitable idea, to this very project of applying compulsion, or, at least, of preparing for its application."

In order, however, to guard against any sudden shock or collision, he proposes a gradual adoption of the proposed provision. On this point he says: "I think a greater utility and efficiency will be secured to this law by proposing that it be applied, not at once, but successively in the communes of the kingdom according to their preparation. The example of a gradual application has been given by the most practical country of this world—by England—where the *Elementary Education Act* of the 9th of August, 1870, was put into execution little by little, and with due regard to the conditions of the particular parishes."

On the question of the so-called "liberty" of the parent, in the premises, he says: "I shall not again undertake the defence of compulsory education under the aspect of justice and of right. At present there are very few who exaggerate the liberty of the father to the extent of conceding to him the noble privilege of condemning his son to ignorance, and through it to prejudice, fanaticism, negligence, and, perhaps, to crime. This liberty of injuring others and of doing evil is incompatible with the other laws of a modern and civilized state, and is no longer admitted, except by a party which in every possible way supports itself in the maintenance of that union of conditions among the people upon which it founds its empire."

No less clear is his understanding of another difficulty encountered in all modern states, the discussion of which follows quite naturally upon that of the one just dismissed: "I shall not devote much consideration to another objection, which, indeed, does not dispute the justice of compulsion but questions its utility. Of this kind is that which admonishes us against the perils of half-knowledge representing the vanity, the self-conceit, the fictitious desires and wants which it awakens but does not satisfy, whence arises a lower class discontented and uneasy, fond of novelty, impatient of the condition in which they were born, and nevertheless without the strength and energy to improve it. Now, I shall not say that in all this there is not some truth. On the contrary, I go so far as to admit the disadvantages of what is called half-knowledge, only I should be extremely glad if any one would point out to me a method of at once securing to all perfect knowledge. Where two-thirds of the population do not,

as yet, know how to read, I cannot conceive how we can begin to confer a more profound culture otherwise than by beginning with the alphabet. If I look at the facts, I see a nation [France] exhibiting in late years a certain distrust of education largely disseminated among the people, and not admitting compulsion, and which has been distracted by interminable revolutions;* and I see another again, [Prussia,] which for a hundred years has never ceased to extend it; and which, among other expedients, has never forgotten that of penalty. I have seen this nation, pursuing a career of progress most rapid, and to-day envied by all, and in the midst of an order undisturbed." * * * If we regard education as perilous, says he, "He who wishes to be consistent with himself should not only desist from every effort to force into the schools those who are ignorant of it, [the alphabet] but should endeavor to prevent the entrance of those who go of their own free will. * * * From this we cannot escape: either the schools contain in themselves a menace to our future, and there is nothing for us but to suppress them, or they constitute the most powerful means for hastening civil improvement; and it follows that we should secure for them the greatest possible efficacy, not only by increasing their number, but also by securing a greater attendance. These are two systems of the most diverse moral nature; opposed, the one to the other, but, nevertheless, both logical. What one cannot comprehend is the remaining undecided between the two, the non-acceptance of the one or the other."

Signor Coppino proceeds to say: "Our schools are to-day undoubtedly more numerous and better than were those of Prussia a hundred years ago, when with well-founded prevision as to the future, compulsion was proclaimed in that country. Nevertheless she did not hesitate, and she has finally gathered the fruits of her confidence; not, indeed, in a day, but in an age, returning time after time to compulsion by means of new laws; and, by dint of constancy, infusing it into the habitudes of the people."

In a preceding part of his address Signor Cappino utters these weighty words:

"If, however, any one, hesitating between old doubts, should return to complain of the opposite defect, deploring the offence against liberty, I say plainly, that of a liberty which, mistress as she was of the destinies of the nations, rendered Italy a disciple and servant, we have made a very long and quite sufficient trial, fearing in our consciences to exercise the duty of limiting it. Whither we are traveling on this road we already know too well to delude ourselves any longer. Every one perfectly free to do what is right, but likewise to do injury to himself; but when a man does injury to others and to the state, that state abdicates the most solemn of its functions, if, admitting the right to injure, and elevating it into a theory of indifference and inaction, it remains careless and *laisse faire*. Through having long since refused to acknowledge the right of the individual to erect himself haughtily against the good of the impotent state, an acknowledgment which would perpetuate the habits of the Middle Ages in modern life, other nations are where they are, and we stand here ready enough to envy them, but not to follow them."

We conclude our quotations with the peroration of this admirable address, which constitutes a fit pendant to the last extract: "We should, without rashness and without imprudence, but also without preconceived fears, and with a frank faith in the ideas which have conferred grandeur and power on others, resolve completely to shake off the shackles of servility in our country, inoculating it, so to speak, with the germs of a homogeneous progress and of a peaceful and orderly resurrection. By how much the factors of modern life failed, or were suppressed through the necessities to which Italy was compelled to submit in order that she might be received kindly on her return to the world, by so much the more is it necessary to see that they be not denied her, now that she has issued from the tempest which might have rendered us, at first, doubting and hesitant. We must resolve to be altogether new, or altogether old; either to return to the feudal dogma of a government which is easier in proportion to the ignorance of the governed (and no one desires this); or, to believe firmly that a nation is strong in proportion to its intelligence and the general dissemination of knowledge. Without this, fostering at once the old and the new; the former through the force of habit, the latter through the constraining power of the civilization which surrounds and invades us, there are generated in the country, antagonisms, contrasts and contra-

* It is well known that Louis Napoleon, in conjunction with the priests, curtailed, as far as possible, the comparatively generous system of public instruction which, in an unguarded moment, they had allowed to be established.

dictions through which one part of the population live with their heads in one age, and another in another one, in the midst of which there can, in the end, be no arbiter but violence. To avoid this indubitable consequence of hanging suspended between opposite systems, and, I might say, of incongruous historic periods, there is no expedient which will save us but that of the diffusion of education. Where, through the force of tenacious traditions, the correction of the religious conscience is slow and obstinate, the school remains the only means of elevating men to the level of liberal institutions and of infusing into the mode of thought and into the souls of all, the fundamental principles of reform, which otherwise do not penetrate into the habits; but remain on the surface, like a plant without roots. This is as much as to say that compulsory education is nothing less than a necessity of the times, in which, since all can do something, it is necessary all should understand and know. It is a necessity which we, born late, obey tardily, but to which we cannot oppose farther hinderance, without falling into the most obvious contradiction with ourselves, and forcing ourselves to confess that our good fortune has played a much greater part than either our thought or our faith, in accomplishing our resurrection."

We think it will hardly be worth while, to vindicate a people, who place such a man as Signor Coppino at the head of the department of national education, from the charge of being a nation of hurdy-gurdy grinders. G.

TEACHERS' INSTITUTES.

Dauphin	Dauphin, Nov. 27	Halifax, Dec.	18
Adams	Gettysburg	Dec.	3
Lebanon	Lebanon	"	4
Fulton	McConnellsburg	"	10
Elk	St. Mary's	"	17
Luzerne	Wilkesbarre	"	17
Huntingdon	Huntingdon	"	17
Beaver	Beaver	"	24
Columbia	Bloomsburg	"	24
Jefferson	Brookville	"	24
Mifflin	Lewistown	"	24
Armstrong	Kittanning	"	24
Blair	Hollidaysburg	"	24
Cambria	Johnstown	"	24
Perry	Bloomfield	"	24
Centre	Bellefonte	"	25
Greene	Waynesburg	"	26
Northampton	———	"	26
Altoona City	Altoona	"	26
Clinton	Lock Haven	"	31
Westmoreland	Greensburg	"	31

Directors' Column.

THE attendance of directors at the teachers' institutes the present season is much greater than usual. It takes time and money for them to attend, but many directors are willing to give both if the schools under their control can be improved. We are satisfied, however, that the possibilities of "Directors' Day" have not yet been conceived, much less realized, by some of the superintendents. They do not seem to be able to make out a programme or to direct the exercises of a meeting of directors. A few of them even seem to be afraid that something will be said derogatory to their own management or contrary to their own views, and hence rather avoid meeting their directors face to face. This is as impolitic as it is cowardly A true friend of public schools wants nothing but what is right, what is best, and he fears no free discussion of any question that can be proposed.

By our laws School Boards are intrusted with the principal powers connected with the management of public schools. They need information respecting their duties quite as much as teachers. Without enlightened views on their part, the success of a system of schools is impossible. Let them be welcome, then, at the teachers' institute. Give them an opportunity to hold a meeting of their own that they may compare views, discuss questions, mark out lines of policy. They may at times make mistakes; we all do that; but men willing to spend time and money for a cause will not go far astray. Give the directors a chance.

A DUTY on the part of School Boards almost universally neglected is that of finding out the children in their several districts not in school and securing their attendance. A board of six directors in one of our townships or smaller boroughs will know every family within their jurisdiction. It is an easy matter therefore to ascertain whether any children who ought to be in school are growing up in ignorance. The duty of a School Board is not discharged when they have provided accommodations for those who wish to attend school, but it embraces the duty of looking after those who may not attend. Let all School Boards hereafter, then, adopt an additional order of business like this: CHILDREN NOT IN SCHOOL. And under this head, let them

find out the children, if any, who are not in school, and take proper means to correct the evil. It will be an easy matter in most cases to enlist the aid of teachers and citizens in a work of this kind. True, we have in operation no compulsory educational law, but all moral and persuasive means are open to us, and these will prove effective if judiciously used. Indeed, so effective do we believe them to be, that we do not hesitate to say that the evil of non-attendance at school, can be greatly lessened if not entirely cured in this way. If the School Board and the good people of a district would take as much pains to get the children to school as the politicians do to get out the voters at election times, the effort would be successful; but whether this is done or not, it is the duty of School Boards to make the effort.

GRADED SCHOOLS.

IT is a mistake to hold that the Pennsylvania school law does not sanction the establishment of graded schools and the teaching of branches of knowledge in addition to Reading, Writing, Arithmetic, Geography and Grammar. The law leaves the time and place of establishing such schools to the discretion of boards of directors; but it says expressly "that they shall have power to establish schools of different grades," and under this provision a High School or a school of any grade can be established. Besides, boards of directors are required "to direct what branches shall be taught in each school." They *must* have certain branches taught, but they *may* introduce any additional branch they see proper. Under this provision there has never been a time when the higher branches were not taught in our common schools.

The act of May 8, 1854, provides that boards of directors "shall establish a sufficient number of common schools for the education of every individual above the age of six and under twenty-one years, in their respective districts, who may apply for admission and instruction, either in person, or by parent, guardian or next friend. And Article X of the Constitution of the State enjoins that, "The General Assembly shall provide for the maintenance and support of a thorough and efficient system of public schools, wherein all the children of this Commonwealth above the age of six years may be educated." Now, in view of this act and this provision of the constitution, can any one maintain that the public schools are designed to give instruction in only a few of the more common and useful branches of knowledge? Suppose children who already understand these branches present themselves at the school houses, must not provision be made for instructing them? Can any child under the age of twenty-one be excluded? If not, must not provision be made for instructing him in such branches as he may be prepared to study? There is but one answer to these questions, and graded schools, including high schools, become a necessity under our system of public instruction. We have heard of late objections to graded schools made by men who ought to know better what they are talking about. And for their edification we may say here that the friends of these schools understand very well that they have on their side of the question the constitution and the laws; and they mean not only to preserve the graded schools we now have, but they intend to plant others as rapidly as practicable in every corner of the State, in town and country, until every child in the commonwealth above the age of six years shall enjoy the privilege of receiving a good education.

A SCHOOL DIRECTOR.

AGAINST THE COUNTY SUPERINTENDENCY.

EDITOR SCHOOL JOURNAL:—I see in the October No. of *The Journal* that you invite free discussion as to the ways and means for the better improvement of our conmon schools. I do not suppose that all can think or see alike in this matter, any more than in religion or politics, and when you have read what follows, you may even censure me as a blind bigot, retrograding towards the dark ages. But, on page 149 *School Journal*, October, 1877, I read these words: "Nor would we have any director feel backward because his views may not accord with our own. * * * We like free discussion, well knowing that through it we arrive at the truth," Then allow me to say, in all sincerity, *Abolish the county superintendency.*

Now, please do not stop and hold your breath, because I mean it, and have put it down with the emphasis of italics. Why it should be abolished there are many reasons, foremost among them is this: It is of no earthly use whatever! The office was not created because the necessity of the case demanded it, but because somebody wanted an easy position, with large salary, for doing nothing but what might be performed for less money and more effectually in another way.

I have been in a teachers' class before now, when the question was asked by the County Superintendent, "What is your primary object in teaching school?" Some of the teachers would answer, "Because I love the duties of the school-room, and desire to shape or mold the youthful mind in such

manner that in after years my pupils may become sturdy men and women, in thought and deed, and may be ornaments to the society in which they move." Now, this is all well enough, and sounds very nice; but was it not for the "almighty dollar" that they toiled and endured the ups and downs of a district school teacher's life? I knew a teacher—poor one though he was—who invariably answered, "Because I want the dollars that it brings." And were it not for the wages he received, he would not have been "teaching young ideas how to shoot." I believe the great dollar is the motive power in this life, and it is the power that created the county superintendency.

So I say the exigency of the case never demanded that this office should be created. I know it will be argued that the superintendent's salary is not paid by direct taxation on the voters of the different counties in the state. Granted. But where is the use of tolerating a nuisance because it costs us nothing directly to maintain it? There are, we believe, better ways to engineer our common schools, and one of them is: Have only three school directors to each school district in the different counties of the state. Let one of them be competent to examine teachers for the different schools in his district, when State Normal graduates cannot be had to fill them; let this director be paid a fair and honest compensation for the time he spends in examining teachers and visiting schools, for you know that "the laborer is worthy of his hire;" and it would not cost half what it does now to do the work that is done by our county superintendents, while the interests of our schools would be more closely looked after than they now are, or than is possible under our present school system.

Much more might be said, but we do not wish to weary your patience, or impose on your good nature. We therefore will close these remarks by saying that they are offered in kindness of spirit towards every one, with the earnest wish that they may be as "seed sown on good ground," that shall spring up and bring forth an abundant harvest. A DIRECTOR.

BOOK NOTICES

BOSTON MONDAY LECTURES. BIOLOGY: *with Preludes on Current Events. By Rev. Joseph Cook. Pp. 325. Boston: Jas. R. Osgood & Co.*

The object of these lectures is to present the latest results of German, English and American scholarship on the relation of Religion to Science. Those contained in the present volume oppose the materialistic, not the theistic, theory of Evolution. We have read but few books with equally intense interest. Among the topics handled by this powerful champion of an abiding faith in higher things, in God and immortality—and that from a scientific stand-point—are the following: "Huxley and Tyndall on Evolution," "The Microscope and Materialism," "The Concessions of the Evolutionists," "Does Death End All?" "The Spiritual Body," etc. A recent critic has stated the case so fairly for Mr. Cook that we cannot do better than present his estimate of the character and work of this distinguished divine, at once an ardent scientist and a reverent believer in the truth of the inspired record. He says:

"The publication in book form of Mr. Joseph Cook's 'Boston Monday Lectures' at once elevates and widens his influence, introduces him to the realm of permanent literature, and makes him one of the religious teachers of the nation. He is not an originator. We look in vain in these lectures for a new discovery, a new hypothesis, or even a new interpretation He is not a systematizer. It would be difficult, if not impossible, to evolve out of these lectures a harmonious system; at least Mr. Cook has not himself done so; perhaps that will come later. But neither is he the retailer of other men's ideas. He gathers from an immense field of literature the latest and best thoughts of the ablest thinkers. He subjects them to a keen criticism, tests them by a searching analysis, and arranges them in admirable classifications. He sets one over against the other, makes the teaching of a Frey correct the statements of a Spencer, or summons the discoveries of a Lionel Beale to plead against the theories of a Huxley. He scrutinizes, analyzes, dissects; as an intellectual chemist, he submits the philosophy of modern materialism and semi materialism to tests, separates its statements and even its definitions into their component parts, and gives you the analysis. He condenses into almost tabular form contrasted and conflicting theories; for example, puts into a single page of his book the seven theories of evolution, and gives the names of the more eminent representatives of each school. And finally he embodies his own conclusions, children always of adoption, not of his own intellectual parentage, in form so graphic and pictorial that they are not only easily cognizable by minds which follow the previous process of criticism with difficulty or not at all, but are commended to such minds by the very beauty and aptness of the presentation, independent of the evidence cited to sustain them. As a harvester and a thresher, Mr. Cook has qualities which entitle him to a first place among the intellectual husbandmen of the age. He is not an original miner; he does not bring the gold from the earth; but as an assayer and minter of the metal which others have mined, he is, if not without an equal, certainly without a superior. There is no book in which the reader will find so many views of so many teachers so searchingly examined and so fairly presented, as in these volumes of Mr. Cook's 'Boston Monday Lectures.'"

POPULAR SCIENCE MONTHLY *for November and Popular Science Monthly Supplement, No. 7: D. Appleton & Co., New York.*

Of the former of these cognate publications, we will only say that the article entitled "The System of Sirius, and the Solar Systems different from ours," furnishes the general reader with some new and wonderful facts in regard to one of the most conspicuous of what are incorrectly termed the "fixed stars;" that "The Differences of Things," by Mr. John W. Saxon, presents to us a novel view of the universe, which, though it is very suggestive and stimulative of thought, is, in our estimation, revolting and abominable; while the "Sketch of Michael Servetus" is one of the most painfully fascinating historical monographs we have ever read, the three papers to which we have referred giving a taste of the admirable variety observed in the monthly selection of topics which characterizes this magazine.

In No. 7 of the Supplement, the discussion called "A Modern 'Symposium,'" the title of which was suggested by that of the famous Platonic dialogue,

(though the subject is very different,) and which was begun in the first number, is brought to a close. At this most delightful intellectual and spiritual banquet have spoken, among others, Mr. Frederic Harrison, the Comteist, Lord Blachford, the Dean of St. Paul's, Mr. W. R. Greg, Canon Barry, Prof. Huxley, and Dr. W. G. Ward, a Roman Catholic, the interlocutors being in all some fifteen or sixteen in number. It may seem little to a reader who is familiar with theological discussions and the spirit, so far removed from amenity, with which they are almost universally conducted, to say that this is the most dispassionate one we have ever followed. Almost every prominent phase of belief prevailing in modern Europe with reference to the immortality of the soul and the nature of a future life, is set forth with an ability of presentation and an eloquence of diction which are as rare as they are delightful. Mr. Harrison, as proposer of the question, has the right of summing up at the end of the discussion. These are his final words: "And here let us close with the reflection that the language of controversy must always be held to apply not to the character of our opponents, but to the logical consequences of their doctrines, if uncorrected, and if forced to their extreme." We hope the Messrs. Appleton will issue this "Modern 'Symposium'" as a separate publication.

RAY'S NEW PRIMARY ARITHMETIC. *For Young Learners. Pp.: 94. Van Antwerp, Bragg & Co., Cincinnati and New York.*

RAY'S NEW INTELLECTUAL ARITHMETIC. *Revised and Improved. Pp.: 140.*

RAY'S NEW PRACTICAL ARITHMETIC. *Revised Edition of the Practical Arithmetic. By Joseph E. Ray. M. D., late Professor in Woodward College. Pp.: 336. Van Antwerp, Bragg & Co, Cincinnati and New York.*

The great popularity and the very large sale attained by Ray's series of arithmetics has induced the publishers to bring them out in revised form. The books are presented in better type, with improved arrangement, and in more attractive dress. Such new features as the progress of the times demands in a text-book on Arithmetic have been added, without loss of anything of marked value contained in the old text-books. We are assured that Ray's Practical Arithmetic has, since its first publication, run through several thousand editions!

A BRIEF HISTORY OF THE ART OF STENOGRAPHY, *With a proposed new system of Phonetic Shorthand. By William P. Upham, Essex Institute, Salem, Mass.*

This is a work of an entirely distinct character among stenographies, and one that will prove as useful to all who merely desire a book of reference on the general subject of short-hand as to practical or amateur stenographers. All teachers will find it of rare interest and continual convenience; and, if they cannot assent to all the author's conclusions in his phonetic analysis of English speech, they will find so much that is suggestive, such novel, yet evidently well-considered views, as invite strongly to the study of a subject of so much scholastic importance. For it is beginning to be understood and accepted that as much of real science and learning can be well used in the foundation work of school training—in the very earliest exercises—as in the higher grades, and that the correct gradation of teachers is to have the very best in the primary schools. In France this art of short-hand (in a simple, clear method), is used to great advantage in over one thousand primary schools as a first easy drill of the hand and eye, and of the voice too, and especially as an aid in teaching orthographic writing in the common long-hand more correctly and readily by supplying dictation exercises to the eye. Mr. Upham's book is beautifully printed, and the numerous illustrations are very clear. It gives examples of the notes used in Rome before the Christian era, and alphabets of forty eight later systems, with descriptions of others, all of which will greatly interest admirers of the art.

AN OUTLINE OF GENERAL HISTORY. *For the Use of Schools. By M. E. Thalheimer. Van Antwerp, Bragg & Co., 28 Bond street, New York.*

This book is printed in clear type, on very good paper, and is well bound, what cannot be said of all the school text-books in the market. It is convenient for reference, giving the principal facts in the history of the world in a condensed form, and is furnished with a table of contents which will render it an easy matter for the teacher or pupil to find whatever he desires to refer to which may be included in the volume. To any one who wishes to "learn history" in the conventional way, it will be welcome; but it is very superficial, a feature, however, which will recommend it to the majority. The author has evidently never read Judge Jay's History of the Mexican War, or else was loath to use the material furnished by that bold, truthful and impartial work.

NATURAL PHILOSOPHY FOR BEGINNERS. *With Numerous Examples. I. Todhunter, F. R. S. Part I. The properties of Solid and Fluid Bodies. Small 12 mo., pp. 386. London and New York, Macmillan & Co. Price $1.50.*

An introduction to Natural Philosophy which may be used in schools or by the general reader. In the arrangement of the book, the first part recalls to the student's attention some things with which he is already familiar, indicates the various branches of knowledge, and gives an outline of that with which he is here concerned; the second part treats of the mechanical properties of solid bodies; the third, of the mechanical properties of fluids; and the fourth illustrates and applies, with upwards of five hundred examples, the principles that have been previously presented. Clearness and definiteness of statement characterize the work throughout.

DIXON'S AMERICAN GRAPHITE PENCILS. *For Office, Drawing and Special Uses. Manufactured by the Joseph Dixon Crucible Co., Jersey City, N. J.*

We have used these pencils and find them very good. An American product from the "Fort Ti" graphite to the Florida cedar, they promise soon to distance "Faber," their great rival in the American trade. The various grades are adapted to all the uses for which a pencil can be desired.

THE AMERICAN NATURALIST contains twenty-two pages of Mr. Alfred Russell Wallace's paper on the "Colors of Animals and Plants," which will be continued, a discussion that will prove highly interesting to all earnest students of natural history; an article by Mr. C. V. Ripley, on the Rocky Mountain locust, in which the writer takes the ground that the ravages of this destructive insect may be at least greatly checked by the adoption of intelligent precautionary measures· also, the usual variety of entertaining and instructive notes, together with notices of new works on natural history.

THE TWELVE INTERVALS.—The tones C sharp and D flat, the tones D sharp and E flat, the tones F sharp and G flat, etc., are in pitch one and the same; that is, the one identical tone between C and D, for example, is sometimes named, or written, as C sharp, and sometimes as D flat, according to the scale-relation in which it occurs. This is true on a well-tuned piano-forte, organ, or melodeon, and the best teachers of vocal music, so far as we have been able to ascertain, make this the standard or model to which they aim to train the ear of their pupils. When we meet with one who objects to this standard as being inaccurate, we may regard it as certain, that however he may have given attention to the scientific or mathematical investigation of the subject, or whatever may be his knowledge of the abstract science of music, he has made comparatively little progress in its practice. Notwithstanding the scale, in its general features, is natural, or is adapted to the nature or perceptions of man, it is also certain that intuition requires to be strengthened by education. It is sometimes asserted that one who has naturally a good ear will sing, even without training, in exact tune; and, undoubtedly, in very rare instances, this may approximate the truth, but such an one is certainly a most extraordinary exception to the general rule of humanity: when, however, the scale is brought to the test of a very close, or, as it were, microscopic examination, there seems to be some uncertainty as to what is the true pitch-relationship of its tones; for it is well known that both intuition on the one hand, and science on the other, seem to lead us away, and in opposite directions, from the view here taken; the testimony of the one being quite contrary to that of the other. On the one hand, the

DECK THE HALL WITH BOUGHS OF HOLLY.

WELSH AIR.

1. Deck the hall with boughs of hol - ly,
2. See the blaz - ing yule be - fore us,
3. Fast a - way the old year pass - es,

} Fa la la la la la la la la.

'Tis the sea-son to be jol - ly,
Strike the harp and join the chorus,
Hail the new, ye lads and lasses!

} Fa la la la la la la la la. { Don we now our gay ap-par - el, Troll the ancient Christmas car - ol,
Follow me in mer - ry measure, While I tell of Christmas treasure,
Sing we joy-ous all to-geth - er, Heedless of the wind and weather.

} Fa la la la la la la la la la.

student of acoustics (or the science of sounds) demonstrates, as he supposes, that there is between C sharp and D flat a very small (to the ear infinitesimal or inappreciable) interval; or, that C sharp is a little lower in pitch than D flat, or that D flat, is a shade higher than C sharp, etc.; on the other, some of the best practical musicians say that they have an intuitive feeling of an ascending relation between, for example, C sharp and D, which seems to require a corresponding ascending progression, C sharp leading to D, and that therefore C sharp should be higher than D flat; and, also, that there is a descending relation requiring a corresponding progression between D flat and C, and that, therefore, D flat should be lower, or nearer to C in its pitch, than C sharp. Thus we have, on the one hand, intuition, and on the other, supposed science or mathematical demonstration, but both *versus* practice. It thus appears possible, at least, that the science of acoustics is not yet established, and that, with regard to the truth of pitch, we are to some extent left to conjecture. In this state of uncertainty, and, to the common ear, imperceptibility, let us adhere as closly as possible to the universally received division of the octave into twelve intervals, making a well-tuned keyed instrument the test of true pitch-relation, or of intonation. On personal inquiry, we have been told by some of the best musicians in the world, violinists and violoncellists, that, practically, they know no difference between C sharp and D flat, D sharp and E flat, etc., but make the same stop for the tone whatever name it bears, or whether it be noted as the one or as the other.—*Music Teacher.*

THE

SCHOOL JOURNAL

ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

Vol. 26. JANUARY, 1878. No. 7.

IN its proper place in this number, under the official head, will be found the Forty-fourth Annual Report of the Superintendent of Public Instruction. No one need be pressed to read it, for it will be eagerly sought for by every friend of education in the State. The report is scarcely as lengthy as usual, but it discusses a number of questions not only of importance to those immediately connected with the work of education, but also of great public interest. The argument in favor of high schools scarcely admits of an answer, a solution is presented of the troublesome text-book problem, and for the first time an attempt is made to overcome the practical difficulties that lie in the way of supplementing our systems of public instruction by the establishment of industrial schools.

We hope the thinking readers of THE JOURNAL will study what the report says on these and other questions and make public their conclusions. Our columns are open to the presentation of all sides of all questions relating to schools.

WE have received from Tanaka-Fujimaro, Senior Vice Minister of Education in Japan, two copies of the "School Economy," translated into Japanese; and also a copy of the report of the Japanese Commission on the educational department of the Philadelphia Exposition. The latter contains an engraving of the "Ground Plan of the Pennsylvania Educational Hall," with the location of the various exhibits. This is all our limited knowledge of Japanese enables us to say of it.

THE Chicago *Evening Journal*, one of the most influential and enterprising papers of the Northwest, has made a new departure in journalism, that seems to be as popular as it is useful. It has opened an educational department in its weekly edition and fills it with the latest school news, the decisions of courts on school questions, the official opinions of State Superintendents of schools, practical papers prepared by educational experts, etc. So far it has been able to fill eight or ten of its columns weekly with matter of this kind, and the demand is said to be such that whole pages will soon be necessary to satisfy it. It is not amiss to point the great newspapers of this State and of the East generally to the success of this western enterprise.

THE enterprising firm of J. H. Butler & Company, 723 Chestnut St., Philadelphia, have long had in preparation the most complete wall map of Pennsylvania that has yet been issued. Neither time, labor, nor expense has been spared to make it at once comprehensive in matter and accurate in detail. Every post-office is given, these from the latest revised lists of the Department at Washington. All rivers and streams, all railroads and canals—everything that can be desired in a map of this kind—will be found here. It should be hung up in every railway station in the Commonwealth, and should go into every school house at the cost of the district—for what local geography is of more importance to our people at large or to the pupil in the school-room than that of their native State? The ignorance of the average

Pennsylvanian as to our local geography ranges all the way from ridiculous to lamentable! Let almost any two men of average intelligence ask each other questions for a few minutes on the geography of Pennsylvania, and they will make the discovery already made by the Messrs. Butler, namely, that a good wall-map is needed for occasional study of said average citizen; and on inquiring for it they will learn further that, with exception of the one under notice, such map is not to be found in the market. The Butler map is four feet by six feet in size, is printed on fine paper, the counties being handsomely colored; it is mounted on strong muslin and on rollers, and retails at the low price of six dollars. We have recently examined it, and take pleasure in giving it this hearty endorsement.

A MOVEMENT of considerable strength is on foot for the purpose of securing the aid of the general government in establishing in each State and Territory an institution for the higher education of women. That there is need for such institutions, few who have considered the state of education in this country can doubt, but as for the best mode of establishing them there will probably be different opinions. Let the question be discussed.

THE *Evening Press*, Pittston, Pa., having stated that neither the teachers nor school directors of that town are subscribers to *The School Journal*, the public-spirited secretary of the school board publishes in the same paper the following reply:

To the Evening Press:

I see by your paper of Saturday last that *The Pennsylvania School Journal* is not taken in Pittston. I beg leave to state that the school directors of Pittston borough have taken *The Journal* for a number of years back, and are still getting it, and no school director or teacher should be without it any month. How many teachers there are in our borough who are subscribers for *The Journal* I cannot say. If teachers are not subscribers they ought to be at once, for they should be posted on the different subjects and suggestions by the best teachers in the State.

JOHN JORDAN, *Sec'y.*

Pittston, Dec. 3, 1877.

THE Board of Trade of Philadelphia are engaged in a movement to bring once more before the Legislature their project of establishing a nautical school in that city on board of one or more vessels to be furnished in accordance with the provisions of an act of Congress, by the United States Government. There has been such a school in operation in the city of New York for the past two or three years, and it is pronounced a success in every respect. The men most actively engaged in the movement are of the highest standing socially and in business circles, and the Legislature will, no doubt, give due consideration to anything they may lay before it.

ONE of our correspondents writes that the Institute in Lawrence county was this year of unusual interest. Profs. De Graff, of New York, and Sensenig, of the State Normal School of Indiana, were the principal instructors. As a token of regard for his labors in the cause of education, the County Superintendent, Wm. N. Aiken, was presented by the teachers with a handsome gold watch. Mr. Aiken has been a very faithful school officer, and we are glad to see his services so highly appreciated. We may also add that he is President-elect of the Penna. State Teachers' Association, as well as Superintendent of Lawrence county.

A MEETING of the Executive Committee of the State Teachers' Association was held in November last. A partial programme of exercises for the meeting of the Association at Reading, in August next, was agreed upon. Some of the subjects are as follows: Methods of physical training; education concerning political duties; female colleges; mission of high schools and means of supporting them; the kindergarten, and compulsory education. Dr. Hayes, president of Washington and Jefferson College, Superintendent Graham, of Crawford county, and S. A. Baer, superintendent of Berks, were in attendance at the meeting.

TOURS to Europe, especially planned to suit teachers, are already advertised for next summer. The latest to which our attention has been called is that of Dr. E. Tourjee, of Boston. This gentleman is best known as the organizer of the great Jubilee choruses of 1869 and 1872. He has engaged the steamer "Devonia," and proposes to sail for the Old World on the 29th of June, 1878. The trip will embrace the most interesting places in Ireland, Scotland, England, Belgium, Switzerland and France, including a week or more at Paris. It will last a little over two months, and the cost for all necessary expenses will not exceed $400.

We mentioned on another occasion the contemplated excursion planned by Dr. May, of Ontario; and we understand that Prof.

Beard, of the California Normal School, in our State, has in view something of the kind. Doubtless, for those who have the time and money to spare, a visit to Europe next summer will be made easy.

THE following programme of school work was presented at the late session of the Mercer County Institute by Mr. H. R. Stewart, Chairman of the committee appointed for this duty. It was approved by the Institute, with the addition of United States history in the fifth grade:

FIRST GRADE.—Alphabet naming, printing letters and words on slate and blackboard, giving sounds of letters and meanings of words, capitals, hyphens, etc. First Reader with oral and printed spelling. Counting numbers, making figures, addition, etc. Language lessons, teach pupils to speak and recite correctly in every recitation. Object lessons, local geography, distances, directions and general knowledge of the neighborhood.

SECOND GRADE.—Second Reader with oral and printed or written spelling, giving the meanings of words, etc. Addition, subtraction, multiplication, object lessons, local geography of the county. Language lessons, synthesis. This should be taught with local geography and object lessons each day.

THIRD GRADE.—Third Reader with oral and written spelling, giving one or more synonyms of each word. Arithmetic, the four fundamental rules, text book. Object lessons. Local geography of the State. Language lessons, synthesis and analysis. The pupils of this grade should be able to give readily the five elements of which a sentence is composed—subject, predicate, adjective, objective and adverbial.

FOURTH GRADE.—Fourth Reader with oral and written spelling, giving definitions, prefixes, suffixes, etc. Arithmetic to percentage. Weekly reviews. Geography, general, with text-book. Object lessons in natural sciences. Analysis, text-book.

FIFTH GRADE.—Fifth Reader with oral and written spelling, definitions and rules. Arithmetic complete, single entry book-keeping. Analysis and parsing, text-book. Object lessons on general subjects.

SIXTH GRADE.—United States history, algebra, physiology and philosophy. Select prose and poetry, analytical.

Teachers are not expected to bend the school to this programme, but to mould the programme to the wants of the school. The amount of time spent on the subjects must be determined by the number of classes and pupils.

H. R. STEWART,
Chairman.

IN commenting upon Wright's Philosophical Discussions, the *North American Review* makes the following remark:

"If we ever have a science of education, it must be founded on an accurate psychology, for how can we train a mind in all its capacities, if we do not previously know, with the precision of a true mental philosophy, what these capacities are, and what are their relations to one another?"

These words are full of meaning. Their author takes it for granted that we have not now a science of education, and in this, in one sense, we are disposed to agree with him. But that there is material for the construction of such a science we are as sure as we are that there can be a science of anything. If the mind has no relations to other things that can be expressed by laws, if no laws govern the relations of its several powers, or control their growth, then is a science of education impossible; and as "one link broken the whole chain's destroyed," there can be no science at all and chaos reigns supreme throughout the universe. If we have no science of education, it is because the principles that must constitute the science either have not been fully elaborated or have not been gathered up into a body of doctrine worthy of the name of science. That many such principles have been discovered and are at our command, is certainly true; when we shall have a complete, well-defined science of education, it is hard to foretell.

The author of the quotation from *The Review* holds truly that a science of education must be founded on "an accurate psychology." This explains why the science of education is incomplete: we have no "accurate psychology." Much has been done to establish a science of the mind; many thousands of volumes have been written upon it; the wisest men the world has ever seen have searched for truth in this field; but up to the present time but few principles relating to the subject have been universally acknowledged as beyond question. There are some such principles, however, and these must form the basis of the science of education. Year by year, it is hoped, their number will increase, and as they do, the science built upon them will broaden until it assumes its proper place in the circle of the sciences.

It is asked, "How can we train a mind in all its capacities if we do not previously know with the precision of a true mental philosophy what these capacities are, and what are their relations to one another?" This is a hard question for the practical teacher. No mind can be properly trained without a knowledge of it. An effort to do it is but a leap in the dark. The work of the school room is in great part guess-work. The mental philosophy we have is quite likely faulty; but such as it is not one teacher in a thousand has made it an object of serious and prolonged study. Rank empiricism rests like an incubus upon the profession. This is its shame. Is there no way to blot it out?

HOW OLD ARE WE?

THE *Eclectic Teacher*, Kentucky, some time last summer stated in compliment that the *Pennsylvania School Journal* is the oldest educational magazine in the United States. The editor of the *Ohio Educational Monthly* was not pleased with this statement and claimed that his paper was some months older than ours. We presumed at the time that he was right, and took no further notice of the matter. In his last number he gives "a full list of educational periodicals published in this country," with the "time of first issue," etc. At the head of this list he places his own paper, the *Ohio Educational Monthly*, and gives, as the date of the first issue, January, 1852. The *Pennsylvania School Journal* occupies the second place, and the date of the first issue is stated to be July, 1852. We are thus made to appear six months younger than our Ohio cotemporary. Now, the fact is that the first number of the *Pennsylvania School Journal* was issued in its present form and with its present name in January, 1852, and bears that date.

Since that time it has never missed an issue. Our friend, the editor of the *Monthly*, usually so accurate, is wrong this time. Besides we wish to ask him whether the *Monthly* under its present name was issued in January, 1852? And, if so, whether it has been regularly published every month since that time? If both these questions be answered in the affirmative, then we will have to determine the relative ages of *The Journal* and *The Monthly* by *days*, not months. And below is the record showing that the birthday of *The Journal* was January 3d, 1852. Was that of *The Monthly* on the 1st or 2d, or are we twins?

At a meeting of the Lancaster County Educational Association, held January 3d, 1852, Mr. Martin offered the following preamble and resolutions, which were adopted:

WHEREAS, The importance of education, though admitted by all, has not yet been sufficiently brought home to the feelings of the people of Lancaster county, so as to enlist their active efforts and co-operation in its behalf; and

Whereas, The best mode of acting upon the individual feeling and interests of the people, without which little success can be expected, is to be found in the agency of the press, therefore,

Resolved, That it is expedient to establish, at the earliest period, a monthly paper devoted exclusively to the spread of information relating to education.

Resolved, That the President of the Association be requested to issue a prospectus for such a periodical, forward it to each member, and undertake the editorial management of the paper, as soon as a sufficient number of subscriptions shall have been received to defray all expenses.

The president of the association at the time of the passage of these resolutions was Hon. Thomas H. Burrowes. It is believed that he had been for some time previously contemplating the establishment of such a periodical; and, without waiting for subscriptions, he issued the new publication at once. The exact date of issue during the month is not known; but the first page is headed "VOL. I. LANCASTER, PA., JANUARY, 1852. No. 1." Now let *The Monthly* tell its story; and, if cannot tell a better one than we believe it can, do the fair thing by taking down its flag, or at least showing hereafter proper respect for people older than itself.

PARIS EXPOSITION.

THE following resolutions were passed by the Department of Superintendence of the National Educational Association at its meeting in Washington, held December 11th, 12th and 13th, 1877, concerning the representation of the educational interests of the country at the Paris Exposition. Copies of these resolutions were placed in the hands of the President of the United States and of Commissioner-General McCormick:

The committee appointed to consider the question of the representation of the educational interests of the country at the Paris Exposition respectfully report the following propositions:

1. That we consider it of the utmost importance that the educational interests of the country should be represented at the Paris Exposition.

2. That the President be earnestly requested to appoint as one of the paid Commissioners provided for in the Act of Congress, a competent scientific expert in matters of education, to organize and take charge of the educational exhibit of the United States, and to report upon Group IL of the Exposition relating to education, instruction and products of the liberal arts.

3. That the President be also requested to appoint a fair proportion of the honorary Commissioners with reference to their special qualifications, either to assist in organizing such an exhibition as is contemplated by Group II., or in reporting upon the question of education as therein exemplified.

4. That an effort be made to have set apart a fair share of the appropriation made by Congress for the organization and installment of the educational exhibit.

5. That the Commissioners assigned to take charge of the educational exhibit be urged to establish as soon as practicable a headquarters at the port from which the goods are to be shipped for the purpose of receiving articles and arranging the exhibit.

6. That if the measures above indicated be substantially adopted, we pledge ourselves to unite in an effort to have the educational interests of the whole country adequately represented in all their depart-

ments, means, methods and results; but if these interests should be ignored in the appointment of Commissioners or in the distribution of the money appropriated we deem it impossible to make an exhibition that will be creditable to the country.

7. That a copy of this report, signed by the officers of the Department, be placed in the hands of the President of the United States and such other authorities as it may be proper to advise concerning our views on this subject.

8. That the Committee be continued for the purpose of carrying what is herein proposed into practical effect.

The report was unanimously adopted.

PUBLIC SCHOOLS AND SCHOOL BOARDS.

THE Philadelphia *Telegraph* of recent date contained a leading editorial discussing the question of public schools and school boards. What is said of school boards is intended to apply only to Philadelphia, but possibly the application may not be out of place elsewhere. We quote below the first paragraphs of the article.

There is no matter of public interest that ought to give greater concern to citizens of all orders and degrees, high and low, rich and poor, than the management of the public schools. It would not be using extravagant language to say that the public school system is the chief corner-stone of our social organization, and that upon whether the public schools are well or ill managed will depend, in a very large measure, our future well-being and social and political prosperity. It was a wise, far-seeing and most statesmanlike policy which inaugurated the public school system, and thus placed the means for so much education as is necessary to make a good and useful citizen of a free nation within the reach of the poorest as well as of the richest. Under the public school system as it is now organized, the child of the day-laborer has abundant opportunity to gain all the educational advantages that are needed for giving him a fair start in life as the intellectual peer of the best of his fellows, and for enabling him, if he is gifted with pluck, perseverance and energy, to climb to the highest round of the social or political ladder. To maintain this system, and to make such improvements as will increase its efficiency and enlarge its benefits, will require the wisest and most judicious management, and sound public policy demands that the conduct of the schools should only be entrusted to citizens who are animated by a disinterested zeal for the cause of public education, and who will perform the important duties entrusted to them with entire singleness of purpose.

It is notorious that the school boards are, in many instances, in a great measure composed of the smallest kind of small politicians, who neither know what the real requirements of the schools are, nor care whether or not they are managed in the most efficient manner. By these men the school boards are looked upon as rounds in the political ladder which will enable them to reach up higher to where the things of fatness are, and as a matter of course all their energies are concentrated upon making such power and influence as they possess in their capacities as directors and members of boards productive of results beneficial to themselves. This sort of thing ought not to be, and the best energies of the best citizens cannot be better directed than in endeavoring to rid the Board of Public Education and the different ward boards of the mere trading politicians who now fill them to a considerable extent, and to preventing such people in the future from prostituting the school system to the basest purposes of political partisanship.

NATIONAL EDUCATIONAL ASSOCIATION.

DEPARTMENT OF SUPERINTENDENCE.

A MEETING of the Department of Superintendence, National Educational Association, was held in the lecture room of the Congregational church, Tenth and G streets, Washington, D. C., on the 11th, 12th, and 13th of December last. About one half of the States were represented by their State school officers, and Superintendents were present from a goodly number of cities and counties. Besides these, the several sessions of the meeting were attended by many Government officials, including the President, members of Congress, members of Boards of Education, teachers and citizens. A more earnest body of educators has probably never assembled in this country, and we are glad the proceedings in detail will be published in circular form by the Bureau of Education. We have space for only a brief sketch of them.

THE OPENING EXERCISES.

The exercises were opened with prayer by the Rev. Dr. Rankin. The presiding officer, Mr. J. P. Wickersham, Superintendent of schools in Pennsylvania, made a few inaugural remarks, impressing upon the meeting the necessity of confining itself strictly to the important business which would come before it.

Messrs. Wilson, of Washington, Smart, of Indiana, and Newell, of Maryland, were appointed an executive committee to arrange the business for the various sessions.

A letter was read offering the Department the use of the parlor of the Ebbitt House; the offer was accepted with thanks.

The proper representation of the educational interests of the country at the Paris Exposition was then discussed. The president being called on by the meeting, spoke at some length on the subject.

On motion of Gen. Eaton, United States Commissioner of Education, a committee of five—consisting of the President, Messrs. Apgar, New Jersey; Hancock, Ohio; Lemmon, Kansas; and Gilmour, New York, was charged with the subject under consideration. Messrs. Eaton, Pendleton, Va., and Runkle, Mass., were appointed a committee to whom the duty was assigned of inviting the President of the United

States, the Secretary of the Interior, the District Commissioners, and the Committees on Education in the Senate and House to be present at the meetings of the Department. Messrs. Henkle, Ohio; Orr, Georgia; and Jones, of Penna., were appointed a committee on resolutions.

The subject of the best school organization for a State was then discussed, Mr. Hancock, of Ohio, opening the debate. Messrs. Barringer, New Jersey, Harvey, West Virginia, Wickersham, Pennsylvania, Apgar, New Jersey, Gilmour, New York, Lemmon, Kansas, and Jillson, South Carolina, followed, for the most part explaining and defending the systems employed in their respective States. A great diversity of methods in the appointment or election of boards, superintendents, etc., was developed, and many conflicting opinions as to the best plan to be adopted were expressed. The matter was referred to a special committee, consisting of Messrs. Hancock, Ohio; Smart, Indiana; and Wickersham, Pennsylvania.

A report was received from the Executive Committee recommending the appointment of a committee on legislation in respect to the support of the National Bureau of Education, National Educational Museum and a national educational fund, consisting of Messrs. Newell, Maryland; Wickersham, Pennsylvania; Orr, Georgia; Bowman, Kentucky; Hancock, Ohio; Tarbell, Michigan; Lemmon, Kansas; Gilmour, New York, and Smart, Indiana. The report was adopted.

Senator Burnside, Rhode Island; Representatives Loring, Massachusetts, and Willetts, Michigan; Mr. Hitz, the Consul General of Switzerland, and Dr. Barnard, Connecticut, were present during part of the session and addressed the assemblage.

EVENING SESSION.

The convention was called to order at 7.30 by the president, J. P. Wickersham, who announced that the business of the evening would be the reading of an essay by the United States Commissioner of Education on "What has been done by the General Government in aid of Education," after which the discussion of the subject would be invited.

Gen. John Eaton, who was received with applause, then proceeded to read a paper, in the course of which he recited the ordinance of 1785, which was repeated in 1787, showing the views of the founders of this country on the subject of aid to education as evidenced in the grants contained in these ordinances of the Northwestern territory for that purpose. He also quoted several acts of the Continental Congress giving a percentage of the proceeds of the public land sales, and the constitution of Georgia, until recently, recognized the claims of education on the proceeds of the sale of swamp lands. Under the general division of his subject devoted to the consideration of other aids to education derived from the Government, he stated that there had been a large surplus fund in the United States Treasury to the credit of the Educational Bureau, but which was now all distributed. The common school fund of New York State derived from the General Government has reached some $7,916,000, over a quarter of a million of which is now kept as a reserve fund. He also stated in detail the various sums applied to aid the colored, Indian, military and naval schools. The forces set in motion by the distribution of these vast funds and domains, no human mind can measure. Unless children are taught how to govern themselves they cannot become good citizens.

He said it was a singular fact, and one which was significant in the present crisis, that no great progress has been made towards education without Government aid, consequently the legislatures owe it to the people, to provide the necessary means to educate their masses. He went on to say that Congress should not refuse to grant to the old States a fair share of the public lands for educational purposes. In reviewing the later progress of the great cause, he pointed out the influence of the slave-owning element in the South, previous to the war and that of the liberated, but nearly totally unproductive negroes afterward in retarding educational progress. It was not, he said, his intention to advise that Congress be pressed in any special direction in this matter, but only to point out the manifold advantages held out by a higher education. He described in detail the work of the Educational Bureau, but said that pecuniary aid was necessary. In reference to the mode of applying aid, he mentioned that of the trustees of the Peabody fund, who add to the amount which the people themselves raise, and in that manner, by the distribution of, say, $1,000 a year, they secure the local expenditure of $7,000 for educational purposes.

In inviting discussion, the President alluded to the several bills now before Congress to provide aid for education, which propose to draw the funds from the proceeds of public lands, patents, and the returns made by railroads respectively.

Dr. Orr, of Georgia, said the educational difficulties of the Southern States were very peculiar. In Georgia, at the conclusion of the war, a great problem confronted them. The ratable value of property in the State was, in 1860, over six hundred millions. After the war it was one hundred and seventy millions, and, at the last valuation, two hundred and seventy millions. The war also brought a large number of colored children on their hands to be educated, belonging to parents who paid no taxes. They make no useless regrets over the past, but are determined to do even-handed justice to the whole people—a simple act of justice to aid the South in carrying the burden of the helpless colored population. In several of the States a majority of the voters cannot read their ballots. The District of Columbia has special claims on Congress. The permanent residents should not be taxed to provide schools for the children of the floating population. He made a calculation in 1875 and found that forty per cent. of the voters in Georgia could not read their ballots.

Mr. Philbrick, of Boston, said there was but one opinion in Massachusetts, and that was thoroughly in favor of Government aid.

Dr. Bowman, of Kentucky, hoped the able and exhaustive paper of the honorable Commissioner would be published.

Dr. Loring, of the Massachusetts delegation to Congress, made an eloquent appeal for unity of action.

Dr. Henderson, of Kentucky, stated the details of a plan he had organized in his own State for the education of the colored children, and said that, if aid was granted in his State it would be applied to the colored schools until they stood on a level with the white children.

SECOND DAY.

The attendance was about the same as on the preceding day. After the meeting was called to order the committee on the representation of our educational interests at the Paris exposition reported, through its

chairman, Mr. Wickersham, the advisability of requesting the President of the United States to appoint, as one of the paid commissioners, a competent, scientific expert in matters of education, to organize and take charge of the educational exhibit of the United States, and also to appoint a fair proportion of the honorary commissioners with reference to this purpose. The report also recommended that an effort be made to obtain a fair share of the Congressional appropriation for this purpose, and suggested that if the measures above indicated should fail no creditable educational display could be made at the exhibition.

Dr. Loring then addressed the meeting on the subject of the "Aim of American Education." His facts were interesting and instructive, and were impressed upon the meeting by the vigorous words in which they were clothed, and by the very effective manner of the speaker's delivery.

General Garfield then addressed the meeting in his usual eloquent manner, and was listened to with the most absorbed attention. He referred to the great educational case of brains against brick and mortar. The two great defects of the modern system of school education are the cultivation of buildings to the detriment of brains, and the over-cramming of the pupil with numerous studies. The fact that the number of failures to enter West Point was increasing yearly should be met and explained by educators. No subject is of greater national importance than that of education. If ever the United States should escape the fate predicted by Macaulay it would be through the efforts of the schoolmaster.

Mr. Philbrick, of Massachusetts, made a vigorous defence of the present school system, and suggested that the trouble at West Point was in the old-fogyism of the examiners, and not in the parties who were examined.

Mr. Hancock, of Ohio, continued on the side of the present system, and said the aim of teachers today was to make their pupils cultivated men and women, and not to fit them to pass the examination at West Point.

Mr. Holbrook, of New Jersey, upheld Mr. Philbrick in his views.

The President solved the West Point problem. The grade of examination has been raised, and the system of election is vicious. The politicians use the nominations to West Point to pay their political debts. He illustrated and enforced his views by a recital of his experience in his own State, where nominees, as the result of competitive examinations, have always passed and stood high in their classes, while persons who were nominated on political grounds have generally failed.

The discussion of the relative merits of the old and new systems made a lively fight, and considerably shook up the "dry bones" of the Department.

An elaborate defense of high schools, by Mr. Dickinson, Mass., and a resolution on the subject by Mr. Hovey, brought the morning session to a close.

AFTERNOON MEETING.

In the afternoon the large audience-room of the church was completely filled with the teachers and advanced scholars of the public schools to listen to addresses by Prof. Ellis A. Apgar, superintendent of instruction, Trenton, N. J., and Prof. Dickinson, of Mass., on practical education. The blackboard was used by both speakers, and the lectures were extremely interesting and instructive to teachers. We regret that our space will not permit a full report.

AT THE WHITE HOUSE.

At the close of the morning session the members called in a body at the White House. President and Mrs. Hayes received them in the East Room. Mr. J. P. Wickersham, in behalf of the Department, expressed satisfaction at the educational passages in the President's annual message. In his reply, the President promised to aid them in their great work by every means that lay in his power. The Department then proceeded to the Interior Department building to call on Secretary Schurz. In his absence they were received by Assistant Secretary Bell, and afterwards called at the Capitol and Corcoran Art Gallery.

EVENING SESSION.

The meeting was called to order by President Wickersham, who introduced Dr. Runkle, president of the Massachusetts Institute of Technology, at Boston, as the lecturer of the evening. His subject was "Industrial Education," to which, he said, little attention was paid prior to 1862. He defined industrial education to be such as fits a person for some special industry. [President Hayes here entered and took a seat on the platform, amid applause.] He said this involved a training of the mind and the hand. To illustrate the practicability of this, he exhibited some of the products of the "Whittling School," of Boston, with the tools used, and described the method of instruction pursued. The same was done with regard to the shop or school for "vise-work," the set of tools used being shown, and a list of the trades into which such work enters: instruction in the forging was next treated of, as was foundry work and machine tooling.

Dr. Runkle then proceeded to show how these branches could be taught in connection with our common schools. He said the master workman of the school at Boston was confident that he could teach these processes just as readily to boys of 12 to 14 years of age. To the objections that it would be expensive, he replied that it was not so expensive as ignorance. He claimed that its introduction could be justified on purely educational grounds, and for the vast power that it would confer upon the country. He thought it would tend to solve the great labor problem. Brute labor has no dignity about it; it acquires dignity only when it becomes educated and intelligent. The method he had described was the one pursued in Russia, which had recently donated a set of models from the Imperial school at Moscow.

At the close of the lecture, a general discussion took place of the methods of carrying out the system in connection with our common schools.

THIRD DAY.

The forenoon of the third day was spent in presenting to several committees of Congress the views of the Department on a number of educational questions of a national character. These were well received, and there seems to be a disposition among Congressmen generally to deal fairly by the educational interests of the country.

AFTERNOON SESSION.

The Department assembled at 12 o'clock. Mr. Smart, from the commmittee on the best form of school organization for a state, gave an abstract of the report which will be presented by the committee

at the meeting of the General National Association next summer.

A discussion on the subject of high schools was then ably opened by Mr. Smart, of Indiana. He stated that through investigations in his own State he had found that more than fifty per cent. of the persons, papers, etc., consulted by him were in favor of high schools, and of the remainder, nineteen per cent. were undecided. He replied consecutively to the numerous objections urged against high schools, arguing that they were all without weight. General discussion followed, developing a great diversity of opinion on the subject.

The subject was referred to the President of General Association to be presented for further consideration.

Hon. G. J. Orr, Superintendent of Public Instruction of the State of Georgia, gave an admirable account of the condition of education in the South.

The Consul-General of Switzerland presented through the President of the Department to the Bureau of Education a fine portrait of the great Swiss teacher, Pestalozzi.

A series of appropriate resolutions was then read by Mr. Hinkle, of Ohio, chairman of the committee, and adopted; when, after disposing of some miscellaneous business, the Department adjourned *sine die*.

The Pennsylvanians present at the meeting were, in addition to the State Superintendent of Public Instruction, Deputy State Superintendent Lindsay, Superintendents Jones, of Erie, Gotwals, of Norristown, Curtis, of Corry, Baer, of Berks, Woodruff, of Bucks, Cooke, of Fayette, and Professors Adney, of Washington and Jefferson College, and Beard, of the California Normal School.

READING IN COMMON SCHOOLS.

J. M. GREGORY, LL. D.

OUGHT reading to be taught in our common schools? Certainly, my friend. But what reading? how much? and how? Let us consider the question without prejudice. In the common schools, as now managed, about one-half of the time is given to the reading lessons. A county superintendent of schools told the writer that in his county nearly two-thirds of the time in school is spent in the reading-classes. Is this necessary? Is it profitable? Is not this one of the thieves of our school system, which rob it of its fruitfulness, and bring upon it the too common reproach of poverty in results? Let us look at it carefully but fearlessly.

Children must be taught to read printed books: reading does not come by nature. But the vocabulary of little children is small, and to learn to read such books as they can understand, can be done usually in a few weeks. A term or two at most, will be sufficient if the children are of sufficient age. It should be done at home; but as many parents have not the time, and fewer still the inclination, some of the children must evidently be taught to read in school. This is agreed.

But ought this teaching to go farther than the simple words and sentences which children easily understand? Need the reading lessons drag on through term after term, and year after year, consuming half the school-life of the majority of our children? Of what use those long series of reading books filled with the mere fragments of literature; or of those time-wasting reading lessons, in which each pupil reads a single short paragraph, and then stands idle for the next quarter or half-hour, it may be? Occasionally a skillful teacher may make it a little better, and throw a little life into the tedious monotony; but teachers get tired of the well-thumbed pages and paragraphs as well as the children, and they let things go. Listen to the dreary droning of the "choice extracts," out of which both teachers and pupils have long ago chewed the last drop of sweetness!

A MORE EXCELLENT WAY.

The writer taught his own five children to read. The task was not a long nor difficult one; it occupied a few of the odds and ends of time to be found in the busiest life. It was as good as play. Having read to the little one a few short stories to excite its curiosity, then, by the so-called word-method, it was taught some of the more common words, and shown how to find out others. The story books were then put into the little hands, and the work went on of itself: no urging was needed—the charm of the story did the business. There was no foolish attempt to force the child to read what it did not understand. If the story was not interesting it was remorselessly let alone, and a better one was found. Doubtless many a hard tussle was had with new words and big ones; but the story could not be given up, and so the hard word was mastered. Sometimes the children came of their own accord to read me some amusing passage, and corrections were made in their pronunciation; but nothing was forced. Their taste for books grew till they had to be restrained from reading too much and thus injuring their health. Their knowledge of

words steadily increased; their intelligence was fed; and before they went to school at all, they became better readers than any school-taught children of my acquaintance. They were not remarkable children. One of them learned with much difficulty, but once started in the story books, he became as fond of reading as the others. In the families of several of my acquaintances the same plan has been tried, and with the same result.

Let this method be tried in our common schools. Let a school be supplied with at least fifty dollars' worth of the brightest and best story books for children that can be found. Let two hours a day of the time now given to reading lessons be allowed to the children to read the story books, on condition that they first learn their lessons, if you will. Occasionally, let the child that has found something too interesting to be kept to itself, be permitted to read it aloud to the teacher or to the school. Lessons in articulation and in voice-culture may be given as such, at the proper time. They are not necessarily connected with reading lessons. The older pupils may also take lessons in elocution, if the teacher knows how to teach it. Elocution belongs to speaking rather than to reading. Let it be studied in its own place, and for its own uses.

THE ARGUMENT.

Our common school studies miserably fail to make intelligent people. Arithmetic, grammar and geography may help to discipline the mind, but they do not feed the intelligence. Our literature—our books—these are our true storehouses of knowledge. Books are the cheapest and best of all teachers to those who love them and can use them. A reading people can never be an ignorant people. The children who read stories will learn to love books. They will pass from stories to history, poetry, philosophy, science, and the whole round of learning, and especially if the other parts of their school work be well done.

The cost of the story books will be less than the prices of the discarded reading books. Economy is on the side of reform. The schools will gain in interest and fruitfulness. Dull intellects will awaken. Thoughts will kindle. Talk will be heard, full of imagination, reasoning, conjecture, and fruitful debate. The other lessons will be better learned, both because of the increased intelligence, and to win the time for more reading. Good readers will be multiplied. The terrible monotone will cease; and our children, no longer spoiled by pretended reading lessons, will read as naturally, easily, and pleasantly as they talk.

N. E. Journal of Education.

EDUCATION AND PAUPERISM.

THERE has come into our hands a pamphlet by Hon. C. C. Andrews, Minister Resident of the United States at Stockholm, on the Pauperism and Poor-Laws in Sweden and Norway. We extract from it the following paragraphs, bearing upon the relation of education and pauperism:

Without doubt one of the chief remedies against poverty is education. "Economy is not a natural instinct, but the growth of experience, example and forethought. It is also the result of education and intelligence. It is only when men become wise and thoughtful that they become frugal." Knowledge helps much to give a person foresight, and foresight impels him to that industry and self-denial which leave something for a day of need. So, also, education supplies sources of rational recreation that may be expected to supplant the gaming-table and the drinking-saloon. Workingmen crave some sort of diversion, and in these countries they seek it to a dangerous extent in strong drink and to a serious extent in gambling.

Intellectual pleasures are, of course, more safe and economical than the pleasures of the cup, and where they can be substituted for the latter there is almost a certainty that the party concerned is on the road to competency instead of to the poor-house. But to what extent must education be carried, in order that it shall conduce to intellectual pleasure? Clearly to that extent that one can enjoy reading good authors. It must go beyond the bare capacity to read, and, at least, to the extent of reading with ease. If a person has in childhood, attended school, yet made no further progress than barely to read, his reading will be no pleasure to him; it will be a task which he will avoid, and he will seek recreation from some other source than books. When, therefore, the statistics of a country inform us that such a percentage of all the children have learned to read, we must ascertain what proportion of them can read with readiness, if we would know to what extent their education will probably prove to be any source of recreation for them.

It happens that there are some statistics showing the proficiency of young Swedes in reading. Every summer about 30,000 young men from the working-classes are called out for the first time, at the age of twenty-one, for two weeks of military drill. The official report in regard to those called out in 1875, all of whom were born in the year 1854, shows, first, that out of 30,487 young men from all parts of the country who presented themselves at the different mustering-stations, 7,058, or 23.15 per cent. were rejected for physical disability; and, secondly, that of 25,173 who were accepted, only one per cent. were unable to read, while only 52.4 per cent. could read with good readiness. There were 46.6 per cent.

somewhat practiced in reading. It can hardly be presumed that the 23 per cent. who were rejected for physical disability could have passed so good an examination in reading as those who were accepted. Hence we may infer that scarce half the working population can read with ease and pleasure. And yet all of these young men were brought up at the common schools, and some may have attended the high schools, under a compulsory system of education. A similar system exists in Norway, and the valuable test above mentioned fairly illustrates the practical efficiency of the "folk" or common schools in both countries. It shows that much improvement must be introduced before intellectual diversions can supplant the habit of drinking, and the wasteful indulgence which now prevail.

Again, a great obstacle to the well-being of the people is to be found in the low state of female education. The provision for the education of girls remains much inferior to that for boys. For the latter the State provides high schools in every leading town; but for girls, only common schools. The fact that out of 133,249 children born alive in Sweden in 1874 there were 19,546, or 14 per cent., who died before they were a year old, is a sad proof of the ignorance among women.

THE RUNAWAY SCHOLAR.

JOHN R. DENNIS.

HE was not a bad boy: I mean he neither lied nor swore; he loved his father and mother, and he was a favorite at school; in fact he was the best Latin scholar in the class. Why he ran away was rather a mystery to me, and yet I think I understood it better than any one else. Charlie Butler and I had a room at "Denville Academy;" that is we studied in one of the rooms and came in when the bell rang, and recited. He was then about 16 years old, and I was one year older. We studied Algebra, Latin, and Geometry together, for by his aid I could keep up in the classes pretty well, but he was far superior to me. Our room was next to the school-room opening into it; and often have I seen him open the door to speak to the principal, as, "Mr Steele, how do you translate 'prosequentium?'"

"What is the sentence?"

"Livy says, 'Ille fero, quacumque ibat, viam facere, donec multitudine etiam prosequentium tuente ad portam perrexit.'"

"Ah, yes, he is speaking of Virginius; he says:—'He forced his way with a knife, wherever he went, until, protected also by a multitude who followed him, he reached the gate."

Besides, he could play chess and beat any other boy. On the whole he was something quite extraordinary, and we prophesied that he would become a great man. We were preparing for college and used to talk over our futures, sometimes.

"I tell you what, Jack, I seem half sick of going to college."

"No, you are not," I said; "You will do this old academy credit."

"I tell you I would not go if I did not want to please the governor; but it would break his heart if I should not go through."

"What would you do—what are you thinking of?"

"I don't know I am sure; but I wan't to see something of the world, and see the Chinese and Hindoos, and all that sort of thing."

"Just like Bill Sweepstakes."

"Why, how did you know anything about him?"

"Oh, I saw the book under the lounge cushions after you went out, the other day. You hid it from me pretty well, but I read it. I don't believe in all that stuff. Things are not so easy as he makes out."

"Well, Jack, I'd like such adventures with the Malays—shooting down those fellows is good enough for them. I've got a revolver that would do the job."

"I'll bet you, Charlie, that the man who wrote that has never been out of sight of land, never saw a Malay, and would run quick enough if Weston's old cow should run after him."

"Wouldn't I like to be left on an island like Robinson Crusoe?"

"No, that must have been too much like a penitentiary—no one to speak to."

"He had his man Friday."

"Yes, but what was he? Robinson was glad enough to come away. Besides, Defoe wrote that—it is all imagination."

I did not think that Charlie really thought of putting his ideas into practice; but such was his determination. Some months after this, he came in one day, and said:—"Jack, don't you say a word about what I am going to say."

I promised, but feared he had committed a murder, accidentally, of course, so solemn was his manner.

"I'm going to sea!"

"What, really, sure now?"

"Yes, I cannot stand it here any longer, I cannot breathe, I want more room."

"How your father will be disappointed, won't he?"

"Yes, and mother, too, but I can't help it."

The books of adventure he had read had excited his imagination, and his plans were laid. One morning I went to school, and my chum was missing; I said nothing at roll-call. I felt sad, and lonely, besides I had a dreadful secret. The morning hours rolled slowly away, and at last the lessons were all done and we were on our way home. I had to pass Mrs. Butler's house, and, as I feared, there was Mrs. Butler standing on the piazza looking for Charlie—he was the youngest son, and a pet. I pretended not to see her, and hoped to get past unobserved. But I was mistaken.

"John, John." Still I did not look.

"John, John—Mrs. Butler is calling you," said some of the boys."

"What do I care—I am in a hurry. Some of you go and see what she wants." And so saying I hurried on, but her eye detected my movement.

"John Dennis, please come here."

I went slowly up the walk debating what to say to her questions. She was a kind, motherly woman, and I had often eaten doughnuts and mince-pie in her kitchen with Charlie.

"Where is Charlie?" said she, looking at me.

I turned around and looked at the boys, as if to see if he was among them, and replied,

"He was not at school to-day."

Then I faced around and contrived to look her in the face. "He went up to Mrs. Smith's yesterday, after school, and meant to stay all night, but I certainly thought he would be at school to-day." So I went on my way home unhappy enough. Before

school opened next morning the news had spread—Charlie Butler had gone to sea!

He reached New York and found a place on a ship, just about to sail for Hamburg. The Captain agreed to give him $10.00 a month and his board. He had not been out but a few days before he found the life on ship-board most repulsive and oppressive. The captain and crew were ignorant and rough men, they all swore oaths, and used filthy and obscene language. There was nothing attractive but the blue ocean and the starlit sky—these soon had a sameness worse than the routine of the lessons in the Academy. Charlie hoped things would improve in Hamburg, but on his arrival every one was set to work to unload the vessel, then they scraped and cleaned all the wood work and repaired the sails.

By this time the captain had got a return load and all hands were set to work to roll in barrels and lift heavy boxes. When all was done the ship started on her return trip. The life of a sailor Charlie found was that of a day laborer; he had never been used to work so hard, and the task proved an unpleasant one. Still, he felt desirous of trying it again, and on arriving at New York, hired out on a ship bound to Monte Video. It went out loaded with kerosene oil, lard and meal, and came back with hides. The smell of these was exceedingly offensive to Butler but there were no means of escape. Then he sailed out on an Australian ship, and at Australia found miners going to the mines, and went with them. Here he worked, for he felt ashamed to come home with nothing to show for his trip, but no more gold could be found than would pay for his food and clothes. Finally, he came back to the coast and determined to start for the home, that now, after his wandering seemed so pleasant to him. He found a ship bound for Liverpool and took passage as one of the crew; his health began to fail and a slow fever set in that nearly carried him off. When he arrived in England, after a long voyage, he was carried to the hospital, where he spent many weary weeks before he could start for America. At this period he reflected how foolish and wild he had been, and longed for the old house under the elms and his mother's voice.

To return home, he sailed as a "man before the mast"—more hard work, more companionship with men who were rude and degraded. One especially, was better fitted to be a convict than a sailor—this man was constantly desiring Butler to fight, constantly taunting with being a *saint* because he would not drink whiskey, curse or gamble. "Saint Butler, come and fight me," said the stout bully perpetually to the young sailor, and the rest applauded. In spite of his efforts to be peaceable, the convict purposely contrived to crowd him on the gangway, so that Butler was obliged to push him back in order to save himself from falling. At this the bully struck him a fearful blow, and before any one could interfere, the young man's face and head were pounded almost to a jelly. Thus his homeward voyage was filled with bitterness, and he landed in New York thoroughly sick of his associates. "If they were only like the men I knew in Denville I should have been happy, but the best men seem to stay at home."

Charlie Butler received a warm welcome, for he was a favorite with all who knew him. He was a changed being; hardship and sickness had sobered him.

"How about 'more room,' Charlie?" said I, one day.

"No room so pleasant as this," said he, looking around his mother's sitting-room.

"How about Robinson Crusoe?"

"Robinson Crusoe is all well enough to read about, but it isn't good to practice. I am going to catch up with you in college, though you have a year's start, see if I don't."

"I thought you were sick of college."

"I was a dunce to believe those stories I read in those books and papers. They are all lies, and, Jack, I warn you to let them alone. There is no enjoyment like that civilized Christian people have discovered, but it took me some time to find it out; that's all."

THE TEACHER'S CARE-TAKING.

THOMAS J. CHAPMAN, A. M.

THE care of the teacher for the pupil should extend over his physical, mental, and moral well-being.

Children, unlike the young of the lower orders of creation, have little or no instinct. Of all the creatures born into the world, perhaps the most helpless and dependent at any given age, is the little child. It requires the intelligence of the full-grown man or woman to properly understand its nature, and to provide for its wants. Hence the teacher of the primary school should have a watchful care for the physical well-being of the child.

Children are apt to be guided in their actions by the caprice or the desires of the moment. Their reason, which is undeveloped, and their experience, which is not great or largely instructive, fail to point out to them the injuriousnes of doing certain things which they desire to do. Hence they are likely to eat unripe fruit, if it comes within their reach, or sweetmeats to excess, if they are supplied with them, or to expose themselves to great heat or severe cold, to run into the rain and get wet, etc., if they are not wisely restrained, thus bringing on sudden or acute disorders, or else laying the foundations of diseases for more advanced years.

Nature is inexorable in her laws. If we sin we suffer, sooner or later. Nature, so generous and bountiful of her springs of enjoyment and happiness, especially to the young, will, nevertheless, brook no violation of her laws. Her penalty is affixed to every infraction, and is reaped from some source—out of the superabundant vitality and freshness of youth, or in the weakness and decay of age.

It will be well for parents and teachers to

bear this in mind. Children are allowed to do so many things which they ought not to do, and the ignorant or careless parent or teacher closes his or her ears against remonstrance with the well-worn phrase, "It won't hurt them." But it does hurt them. Little children are dying every day from causes that might have been prevented, and men and women are dying every day of diseases the seeds of which were laid in childhood, and other thousands of men and women are going about day after day suffering from neuralgia, and rheumatism, and dyspepsia, and a hundred other forms of disease, which have grown out of what were thought to be the harmless practices of childhood.

The teacher of little children can hardly have a higher duty to fulfill, than to look carefully after the physical welfare of the pupil. And this is important, not only because pain and ill-health are things in themselves to be dreaded and avoided, but because almost all true progress in the higher development of the human being, is based on the absence of these. He should see that the school-room is properly ventilated, properly lighted, heated, etc. These concern his own health as much as they do the health of the child. He should watch that his pupils do not eat green fruit, and that they do not expose themselves needlessly to the cold or rain. He should carefully impress upon their minds the danger of exposing themselves to a draught of air, or of taking off their upper garments in order to "cool off" after becoming heated in play or other exercise. They should be taught to keep their feet dry and warm and their heads cool. In view of all this, the teacher, especially the teacher of little children, should be something of a physiologist. If our teachers, as a general thing, understand physiology and the laws of health, there can be no doubt that there would be much less illness and fewer deaths among children; at the same time we should have much better schools, for the attendance would be more regular, and the pupils in attendance would be more healthy and happy.

Is not the amount of children's diseases something terrible! the wholesale visitations of scarlet fever, and measles, and whooping-cough, and diphtheria, that sometimes almost close up the schools in whole districts, and decimate the juvenile population? Who did sin, these children or their parents? But from what I have seen in the course of a pretty long and intimate connection with our common school work, I do not much wonder that these epidemics breaking out in one school should extend to other localities. I have frequently seen the pupils turned out of a hot school-room for recess, into the open air, with the slush snow lying several inches deep on the ground, and the cold rain falling from the clouds; and these children have rushed about through this slush and wet for the allotted fifteen or twenty minutes, and then came in panting and dripping and flushed, with feet and clothes saturated with the rain and melting snow, and in this condition sat down again to their books. Now, does anybody believe that nature ever intended children to be subjected to such a strain as this? Yet this is but a specimen of the abuses to which children are exposed through the ignorance of teachers. I say the ignorance of teachers: but the ignorance of teachers is no greater than the ignorance of parents: so that between defective home management on the one hand, and defective school management on the other, children have, indeed, a perilous time of it. And how great is that peril we may learn from the fact that out of 481,-243 deaths which happened in the United States during the year ending June 1, 1870, not less than 229,542 were of children under ten years of age. Is not this startling? that of the entire quota claimed by the grave in one year, the children of less than ten years of age should contribute very nearly one half.

Then there are other matters, minor points, perhaps, in this connection, which deserve the teacher's attention: the posture of children at their seats and in class, for example. They should be taught to sit erect at their desks; and when they come out to recite, they should be required to walk over the floor lightly and gracefully, and in class to stand erect and respectfully. It has been said that the movements of children are naturally graceful; that may be true, but if it is, they very soon acquire all the slouching, lounging habits of their seniors. It is the duty of the teacher to set a good example himself in these particulars, and at the same time correct these lounging habits, if they already exist. Again, a class should never stand facing a window, if there is any way to avoid it. The light coming in that direction is peculiarly harmful to the eye. If possible, have the light to shine from behind upon the book. "The sun," says Tell,

> "Should shine upon the mark,
> And not on him that shoots."

The care of the child's intellect is not less a part of the teacher's duty. This is not meant in the sense of instructing, but of simple care-taking. A child's mind may be injured as well as his body. No argument is needed to establish that proposition. The teacher should care for the child's mind by giving it something to do. Idleness should be guarded against as much in the case of the child as in that of the adult. It should have some employment to occupy it, and it should not have too much. To give it too much to do, would be like overworking its body; it would tend to stunt its growth and prevent its full development. To gorge it with mental pabulum would be like gorging its material stomach with indigestible confections, and would bring on mental dyspepsia. And the mental dyspeptic is not at all a lovely character.

Care-taking, as distinct from instruction, should prescribe not only what ought to be done, but also what ought not to be done. Just here is where the mistake is so frequently made. Teachers fancy that their whole duty is done with the positive work of instruction: forgetting that the parent is culpable who rests satisfied with furnishing his child with wholesome food, and who does not at the same time guard him against indulging in food that is unwholesome. Very nearly akin to this is the teacher's oversight of the child's moral well-being. The mental and the moral natures are so allied, that very much of what acts upon the one affects also the other. For example, a lesson in personal history—biography, as it is called—for instance, the life of Washington, while it would enlighten the intellect with a knowledge of the character of Washington and the times in which he lived, and of the mighty deeds of those who labored with him to lay the foundations of the government under which we live, his moral sentiment would also be quickened by the lessons of integrity, patriotism, and high purpose, that he would receive. Many lessons will have this double effect upon the mind. Others, however, will affect the intellect alone, as mathematics, logical analysis, &c.; and others, again, will affect the moral sensibilities alone, as works of devotion, sentimental poetry, &c.

The moral nature should be guarded with the greatest care; for what, after all, is a distorted body or an enfeebled intellect, when compared with such a monstrosity as a perverted, seared, degraded conscience! The possessor of such a conscience walks the earth a moral leper, to pollute and blast whatever he touches. How important then that parents and teachers should exercise a wise oversight of the child's moral nature! And as the eye, the organ of the most precious of the bodily senses, is the most delicate of all in its structure, and the most easily injured, so this inward moral principle is most sensitive to outward influences, and most easily harmed. Let the examples set for the child's contemplation be only "whatsoever things are true, whatsoever things are pure, whatsoever things are of good report," and he will surely grow to be more or less like them in his moral nature.

EDUCATION IN CHINA.

WITH all its conservatism, China is taking steps that must eventually work great social and political changes in that old Empire. It is known that there are now in this country a hundred or more Chinese young men and boys pursuing a course of thorough instruction at the expense of the government. Others are similarly engaged in the different countries of Europe. So that it is only a question of time when the sciences, arts and learning of the most enlightened countries of the world will be introduced into China.

Nor is this all. Colleges like our own have been established in China. We take the following account of one, presided over by a countryman of ours, from a recent despatch to the New York *Tribune:*

A letter written by Dr. W. A. P. Martin, President of the Tung Wan Kwan, or Imperial College, at Peking, China, to our Minister, Mr. George F. Seward, and by the latter forwarded to the State Department, presents a very promising outlook for the cause of education in the East. It will be read with pleasure by those who feel an interest in the progress of the people of that quarter of the world toward a higher civilization.

Dr. Martin is an American of high literary and scientific attainments. Most of his life has been passed in China and he has acquired a knowledge of the language, literature, laws and customs of that nation which is probably not surpassed by any other foreigner. The institution over which he presides has been in existence about fourteen years. In its first days it was the object of bitter opposition from the old Conservatives who, in memorials to the throne, predicted all sorts of dire national calamities as the result of this innovation. It is maintained entirely at the expense of the Imperial Government. The students are selected by competitive examination, and receive a monthly allowance, varying from $6 to $16 with board, which is furnished by the college during their attendance. Dr. Martin was appointed to the presi-

dency by Prince Kung in 1869. In forwarding his letter, Minister Seward says:

I have every reason to believe that the most influential men of the government are deeply interested in the college, and that they appreciate the efforts of Dr. Martin and his associates more perfectly than ever before. It is not too much to say that the statesmen of China now recognize the fact that this country is far behind those of the West in the arts and sciences. This has been apparent since the war of 1859–60, more particularly in military matters and in the more directly useful sciences. They thought at first that it would be enough for them to use foreign appliances, either those purchased from abroad or those constructed here after foreign models; but they are gradually learning that there can be no satisfactory development which is not founded upon education and the diffusion of knowledge.

The following is from Dr. Martin's letter:

The operations of this institution are restricted to a comparatively small scale because the demand for what we may call the new education is as yet very limited; but its location gives it importance, and its influence is evidently on the increase. We have on our rolls 101 names, distributed as follows: In the English school, thirty-eight; in the French school, twenty-eight; in the German school seventeen; in the Russsian school, ten; not studying foreign languages, fourteen. Of these fifty-six are in the scientific department, and divided between the classes of mathematics, physics, chemistry and political science, most of them making use of text books in foreign languages.

We have ten professors, of whom six are foreigners and four Chinese; and when our corps of instruction is completed, by the filling of a chair now vacant, we shall have eleven. To these are to be added three regular tutors, all Chinese.

Besides the giving and receiving of instruction which naturally constitutes the chief work of a school, our professors are largely employed in the preparation of books, in which they are aided by our more advanced students. Works on physics, chemistry, and diplomacy, translated mostly from foreign texts, thus prepared have been published under the auspices of the college; and the French Code, a universal history, Woolsey's "International Law," and other books are now in process of translation. We have within our grounds a printing office which goes by the name of the "College Press," with fonts of type, both Chinese and Roman, and six hand-presses.

Our students are all regarded as in preparation for the government service, and are supported at the ex, pense of the government, somewhat as the cadets in American military schools. It is only lately, how ever, that they have begun to be drafted away for official employment. One of them has been sent to the Province Hunan, as examiner for mathematics the opening of such examinations in the provinces being of itself a very significant fact. Two of them have gone as interpreters with the Embassy to England. Two have been named for America; and others will be connected with the Consular Service, or attached to the Legations soon to be established in the various European capitals. The establishment of these two services opens to young men an honorable career of which until recently they had no prospect, and our young institution accordingly feels the influence of this new movement as a garden feels the breath of spring.

Steps have been taken to fill our vacant chair of astronomy by the appointment of Professor Mark Harrington, of Michigan University. The number of our students is to be increased by the drawing of regular levies from the government schools at Shanghai and Canton. A curriculum of studies, extending over eight years, has been published by authority of the Tsung Li Yamen.

In conclusion, I cannot resist the conviction that the Tung Wen College, after an infancy of seven years, followed by a seven years' struggle for existence, is now entering on an era of comparative prosperity. The high authorities of the imperial government take an increasing interest in its success, and the final examinations of the Chinese year were attended for three days in succession by Cabinet Ministers and heads of departments who constitute the Council for Foreign Affairs.

EXAMINATION QUESTIONS.

THE following list of examination questions was used by the Ohio State Board of Examiners. We give the questions upon only a part of the branches in which applicants were expected to pass in order to secure the desired certificate.

THEORY AND PRACTICE.

1. In what respect do *education* and *knowledge* differ?

2. Of what value to a teacher is a knowledge of mental philosophy? What methods do you employ to cultivate the memory of pupils?

3. How do you teach patriotism, æsthetics, and morality?

4. What kind of instruction can be given in connection with an exercise in reading? Of what value to a teacher is a general acquaintance with literature?

5. What are the characteristics of a good question? What do you understand by the topical method of recitation?

6. Name some of the excellencies and some of the defects in our system of graded schools?

7. What methods would you propose for the improvement of ungraded or district schools?

8. By what arguments can you justify the support of higher education by general taxation?

9. Of what utility is the examination of pupils? Under what conditions does the examination of a teacher's class tend to cramp his energies?

10. How does efficient school supervision advance the interests of teachers and pupils? What qualifications should a superintendent of schools possess?

ORTHOGRAPHY.

1. What is the rule for doubling the final consonant? What are silent letters?

2. How are letters written to represent different sounds? What is an aspirate?

3. Name the vowel sounds in the English language. Why are they so important?

4. Write five words in which *y* has a vowel sound, and five in which it has the sound of a consonant.

5. What is a derivative word? When is final *e* omitted in forming derivative words?

6. Give examples of the different methods of using the hyphen in compound words?

7. Give a general rule for spelling words in which *ie* or *ei* is used.

8. What is the rule for spelling words whose final syllable has the sound of *z* preceded by that of long *i*?

9. What is the practical value of a knowledge of syllabication? When a single consonant occurs between vowels not under accent, to which is it joined?

10. Give five examples of words spelled alike, but differently pronounced. Give five examples of words pronounced alike, but differently spelled.

UNITED STATES HISTORY.

1. What settlements had been established in North America prior to 1621? What were the provisions of the first navigation act?

2. What forms of colonial government had Virginia from 1607 to 1776? What was the purport of the Virginia Resolution of 1765?

3. What causes led to the French and Indian War? What territorial changes made by treaty of 1763?

4. What States ceded the North-Western Territory to the Government? What States have been formed from the Territory of Mississippi?

5. Name the States that were admitted into the Union during Washington's administration.

6. In what year did the United States purchase the Province of Louisiana? What was the extent of this territory?

7. What territory of Mexico came into the possession of United States in 1845? In 1848? In 1853?

8. When did the "slavery question" first claim the attention of Congress? What propositions were contained in the Compromise Measures of 1850?

9. When did the Free Soil party arise? What was the object of the Kansas-Nebraska Bill? Give an account of the Lecompton Constitution.

10. What measures were taken by Congress to defray the expenses of the government during the Civil War?

UNITED STATES CONSTITUTION.

1. What was the origin of the Constitution of the United States?

2. How many articles does the Constitution contain? To what does each article relate?

3. Suppose the United States should purchase Cuba: how, under the provisions of the Constitution, could that island secure a representation in Congress?

4. How are vacancies in a State's representation in Congress filled? Describe the manner in which a bill becomes a law.

5. In how many instances has the choice of a President devolved upon the House of Representatives? Under what circumstances can a special presidential election be held?

6. How may new States be admitted into the Union? In case it were deemed advisable to erect two or more States within the present limits of Texas, what would be the method of proceeding?

7. When shall the United States protect a State against domestic violence? What department of the government shall extend this protection?

8. Who may be impeached? How are impeachments conducted? What punishment may follow conviction?

9. How may an act of Congress be declared unconstitutional? What acts of Congress have been pronounced unconstitutional?

10. Describe the method of ratifying an amendment to the Constitution. What restrictions are placed on power of Congress by first amendment?

BOTANY.

1. In what respects do plants differ from animals? What is meant by the flora of a country? What is an herbarium?

2. Of what importance is the study of botany? Name and define the different departments of the science.

3. How does the elementary constitution of plants differ from their organic constitution?

4. Name the four stages of growth in the life of a plant. How are trees distinguished as to foliage?

5. Name and define the parts of a flower. Give examples of typical and anomalous flowers.

6. In what respects do exogenous and endogenous plants differ? How do phænogamous and cryptogamous plants differ?

7. Define the following botanical terms: vernation, venation, morphology, inflorescence, absorption.

8. Name the parts of a leaf. What are the results of respiration and transpiration in plants?

9. What is classification? How does the Linnean system of classification differ from that of Jussieu?

10. What is the object in botanical analysis? What determines the name of any plant?

PHYSIOLOGY.

1. Which are the most important of the inorganic ingredients of the food? Why are these substances necessary to bodily growth?

2. Describe the structure and functions of the principal organs concerned in process of digestion.

3. What is absorption? By what means is the process carried on?

4. What functions are performed by the saliva, gastric juice, pancreatic juice, and bile?

5. Describe the structure and functions of the principal organs concerned in circulation of the blood.

6. What is the structure of the lungs? What is the effect of respiration on the blood?

7. What are the functions of the spinal cord, the sympathetic nerve, and cerebellum?

8. Describe the parts of the eye and give their functions.

9. Describe the parts of the ear and give their functions.

10. Give the structure and functions of the secretory organs.

INDUSTRIAL AND HALF-TIME SCHOOLS.

ANNA C. GARLIN.

THE caustic criticism of "Bingham & Co.," in a recent number of *The Journal*, moves me to a word in response.

Like the writer of that article, I am unacquainted with Mr. Bingham personally, although I have heard his work mentioned with great respect by intelligent persons who had inspected it. Doubtless he is a man of one idea, with more crude mental power than finished wisdom; but his experiment, if honestly and earnestly made, is entitled to the same respect accorded the physical science investigator, who thinks nothing of failures even, if they lead the way toward the exposition of a hidden truth. We have great patience with the man who works slowly and in the dark of ignorance toward some desired result in matter; let us have equal patience with crude experiments in mind, if they are made in the interest of some great idea. And, with all deference to sharply pronounced opinions on the other side, I insist that

there *is* an idea at the bottom of work like Mr. Bingham's, however open it may be to criticism.

One does not necessarily detract from the glory of our much-boasted common-school system, or purpose its destruction, by telling the truth about its present limitations and dangers. Let us consider these a moment.

Mr. Mayo seems to think that any radical system of industrial education, any plan which aims at dividing the school day into mental and physical work from the beginning, is calculated to increase caste distinctions, and is applicable, or would be chiefly applied, to what are called the lower classes. In other words, that the "half-time system of three hours' study and three of labor," per day, would reduce the already scanty measure of education given the children of the poorer families. But what are the facts?

In the first place, our school system, as at present constituted, discriminates unjustly in favor of the children designed for the learned professions and for clerkships, and against those designed for mechanical or manual labor. Inheriting the old idea of education being necessary only for the upper grades of labor, we have enlarged the function of public education without materially changing its method. This discrepancy did not much matter in the early days; for the old New England school was only needed for purely mental drill, since the home-life, domestic and agricultural labor, and the all-prevailing habit of apprenticeship, provided the needed industrial training. Now, however, trades unions, with their tyrannical restrictions of the rights of parents to have their children taught trades, combined with various social changes which make the apprentice system less popular, have altered all this. Hence the result, that while private means for industrial training have so markedly decreased in the past thirty years, there has been no corresponding increase in public provision for the same, and the school system may be charged as tending toward caste distinctions at present. For, while it is possible for boys and girls to take advantage of all its provisions, and fit themselves for almost any literary profession, or lower mental occupation, it is not possible for those destined for mechanical work to prepare themselves in any special way for either in school. Hence the low rate of attendance by such children. The parents can not afford to let them spend so many years in purely mental drill, much of which has no bearing upon their after-life, when they know they will be obliged to supplement public education by other, often expensive and always troublesome, provisions for future business.

At this point steps in the "half-time" or "industrial school" theorist, and suggests that the child be taken to school whole instead of in parts; that he be considered to have a body as well as a mind; that he be trained physically toward use by a wise shaping of the eager, animal activity; that he be protected from the cupidity of manufacturer and the pressure of home-poverty by utilizing the active energy, which, in more primitive times, was of so much account in the family economy: that he be gradually introduced into that hard world of work for which he is destined, by a training which shall be of the hands as well as of the brain. Is there anything subversive of the grand American idea of an equal chance for everybody, in this? On the contrary, does it not aim especially to equalize the advantages of public instruction in their application? At present there are seventy-five schools of mining, engineering and agriculture, and ten schools of art, to 324 colleges and universities, in our country. There are more theological schools alone than training-places for all the various mechanical and industrial pursuits. What results from this discrepancy? An overcrowding of all the learned professions, and an army of clerks able to do nothing but the most inferior mental labor, making them the especial sufferers in financial crises, on the one hand. On the other hand—I quote now from a leading business journal—"in our workshops we find foreign-born workingmen in the proportion of twenty to one American. The American mechanic lacks thoroughness of training; and the American designer has generally to stand aside, while his European competitor occupies his place and draws his salary, because he lacks the advantages of the schools of science and art open to workingmen and their families in France, England and Germany."

The recent strikes should make us pause, when we consider how largely European was their leading element. We welcome all nations to this country, but it is not pleasant to think that the skilled artisan class, that bone and sinew of national life, the class whose condition is the thermometer of commerce, is so largely European as to be able to reproduce upon our shores the disorders born of monarchical conditions. The native-born American, though he be lacking in many things, is apt to know his own land and reverence his own laws; and we need him to lead in every class of industry in this country, if we are to make a homogeneous nation out of our patchwork population.

I have not forgotten that Mr. Mayo himself suggests "the addition" to our school system "of larger opportunities for the technical training of youth after a certain age," doubtless having in mind the cure of the evils just alluded to. Although he does not give the age, it is fair to infer that he means pupils of somewhat advanced acquirements. In some of the few technical schools of this country the standard for admission could be met only by well-trained high-school graduates, as in a college; while in two, at least, graduates from a first-class grammar-school would be eligible. But, unfortunately, the overwhelming majority of children are entered in public school the first day their age makes it lawful, and taken out before they reach the grammar-school. In manufacturing places it is especially difficult to prevent the parents from putting their children at work before they have mastered the simplest rudiments of learning. To take from these denied and defrauded lives one jot of their poor little store of schooling, would be a theft indeed for all friends of education to punish and prevent. But there has been actual experiment made in half-time schools for the benefit of just this class, and it worked well. A public-spirited man, placed on the school-committee, in a small manufacturing place, was struck with dismay at the absenteeism of the children, and after trying vainly many preventive measures, got the authorities to have the same lessons taught at the morning and afternoon sessions of each day, and made arrangements for the children who worked to spend half the day in school and half at the factories. The result was that the parents, realizing a little something from the labor of the children, felt that they could afford to keep them in school longer. The progress made by the children, without apparent loss of health, has a suggestion that this change of employment might be the best for mental and physical conditions. This change is just what the boy gets who lives on a farm. Take the census of an old-fashioned farming district, and nothing strikes one more forcibly than the advanced

age of the pupils in the district schools. They have alternated work and study by weeks instead of by hours, and although they are longer in getting over the ground, it would be somewhat rash, in view of the part farmers' boys have played in our history, to assert that their mental life was less vigorous than that of the quicker-trained city lad.

The kindergarten is practically a trinity of heart, head, and hand-training; and may we not look forward to a continuance of that symmetrical development for the older children in school? There is no complaint more often, and, some of us think, more justly made than that of too much crowding of the purely mental facilities. Now, if we could have three hours mental drill, as thorough as it could be made, for the child old enough to bear it, and light, diversified, *instructive, carefully supervised* manual employment keeping steady pace with it, we might find the cure for too exclusive mental culture. And if labor and study went together for all, the child whose poverty made him early bound to remunerative routine work, might not lose all education as now, but only the special advantage of the technical training. It seems to me, if we are ever to have the professions and mechanic arts placed on an equality of opportunity, the child must have his natural desire to "make things" cultivated wisely from the beginning. And if we are ever to protect the children of the very poor from the worst consequences of their condition, without making paupers of them or their parents, we must continue, in some way, to give them study and work together. The question thus opening up before us is immense, and crowded with difficulties. In view of the relations between our schools and our national existence, the methods we employ and the aims we have before us in public education are of transcendent importance. It may be that purely mental drill is all the State should give; if so, she is doing her duty as well as could be expected. But if moral and physical training belong also to her domain, then we cannot have too much criticism of our present system, even if it take the form of a fantastic hobbyist's denunciation. As Tyndall says of the talk on Evolution, "the only thing out of place in this discussion is dogmatism on either side."

N. E. Journal of Education.

OFFICIAL DEPARTMENT.

FORTY-FOURTH ANNUAL REPORT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, January, 1878.

To the Senate and House of Representatives of the Commonwealth of Pennsylvania:

GENTLEMEN: Allow me, in the report of the Superintendent of Public Instruction, herewith submitted, first, to call your attention to several subjects which, in my judgment, demand the consideration of the Legislature, and, afterwards, to lay before you such statements, showing the growth and present condition of our system of public instruction, as may seem best adapted to the purpose of placing in your hands the most valuable information concerning what is being done among us for the education of the people. It is generally acknowledged in theory, if too often ignored in practice, that education is the leading interest in every free State, and, if the sentiment be true, I trust all proper consideration will be given to what I now have the honor to submit.

REVISION OF THE SCHOOL LAWS.

On several previous occasions I have called the attention of the Legislature to the desirability of a careful revision of our school laws. I hereby repeat my former recommendations in this respect. As they exist at present, our school laws are a mass of fragments, wanting in clearness, cumbered with useless verbiage, and without logical coherence. The basis of the whole, is the act of 1834, but every year, since that time, new laws have been passed modifying and supplementing that act, until we now have a body of enactments, sometimes incomplete, often inconsistent and always of difficult interpretation. Owing to the defects of the statutes there has grown up a kind of common law on the subject, consisting of the practices of school officers, sanctioned by long usage, and the decisions rendered from time to time by the different State Superintendents. These have come to have much more to do with the practical management of our school system than the laws themselves, and it would seem to be the part of wisdom to digest and formulate them, and to give them the force of legislative authority. The contemplated revision should extend, therefore, to both laws and decisions, and as this is a work too unwieldy to be handled to advantage by a committee of the Legislature, while in session, I renew the recommendation, heretofore made, that a suitable commission be appointed to take the matter into consideration, and prepare a full body of laws covering the whole subject of education in the State, and report the same to the Legislature, for its sanction.

SCHOOL ORGANIZATION IN CITIES.

The commission, appointed by the Governor, "to devise a plan or plans for the

government of the cities of this Commonwealth," have had under consideration, among other things, modes of organizing and managing public schools. Upon the invitation of the commission, I gave my views on this subject, before it, but no publication has been made of the conclusions arrived at, if indeed any conclusion has been reached; and, as the report of the commission must come before the Legislature for final action, it may be well to throw all possible light upon the subject.

The general school law authorizes the election of three persons, under the name of school directors or school controllers, in each ward of a city, and the board, formed by an organization of all the officers, thus chosen, has vested in it full power to levy and collect taxes, disburse the money thus raised for school purposes, build school-houses, employ teachers, select text-books, and do all other necessary things, in connection with the management of the schools. By the act of 1874, relating to the government of cities of the third class, which, however, is not binding upon school boards, unless they accept it of their own accord, it is provided that the number of school directors for each ward shall be reduced to three, and the city treasurer acts as the treasurer of the school board.

In Philadelphia, the schools are managed by boards of twelve directors, elected in each ward; and a central board of one from each ward, appointed by the courts. The duties of the two bodies thus constituted, are not very clearly defined, and conflicts of jurisdiction are frequent. The money for school purposes is an undivided part of the general taxes levied and collected by the city councils, and appropriated, at their discretion, upon estimates laid before them, by the board of education. The result is, that on the one hand, the board of education may ask for more money, coming, as it does, in this indirect way, than they would deem necessary, if they were compelled to levy and collect it from the taxpayers themselves; and, on the other, they may find their work crippled by the denial of appropriations sufficient to meet the reasonable expenses of the schools by a body that shares none of the responsibility of this trust. As a matter of fact, the Philadelphia councils have again and again refused appropriations asked for by the board of education, for building and repairing school-houses, for paying teachers' salaries, for providing proper officers to superintend the schools, and for other purposes. This action, on the part of the councils may have been wise, but it is a leading principle in all good government that those in whose hands a trust is placed, should be allowed full means of executing it, and then be held to the strictest accountability.

Pittsburgh has a central board of education and a local board of school directors in each ward; but the local boards elect each its own member of the board of education, and both, with certain limitations, have the power of taxation for school purposes. There is some clashing of authority in Pittsburgh as well as in Philadelphia, but there is much less occasion for it. The school organization of Allentown is very much like that of Pittsburgh. Lancaster elects its school directors on a general ticket, without respect to wards, no elector being allowed to vote for more than half the number to be elected. This frees the board, in good measure, from partisan influences. The board is composed of thirty-six members, twelve elected annually. Many of the other cities of the State have special school laws, slightly modifying the general law, but not changing its principle.

From wide observation of the working of school boards, in this and other countries, I am convinced that such organizations are most efficient when constituted with the following as leading features:

1. A single school board, elected by the people on a general ticket, without respect to wards. Such a board should be small in the number of its members, but allowed ample power to manage the schools under its control. If practicable, the men composing it should be learned in school affairs, as the judges of our courts are chosen from men learned in the law; and the Lancaster plan of freeing the election from partisan influences, has its advantages.

2. A superintendent, an expert in matters of education, as the executive officer of the board, with such assistants as may be necessary to organize the system, examine, and instruct the teachers, inspect the schools, and perform such other professional work as may be assigned him.

3. The taxes for school purposes, to be levied by the board, collected in its name, and the money paid out on its orders. The financial agents of the board may be the same as those of the city councils.

I do not deem it necessary here to present an argument in favor of the propositions above stated. They are those any experi-

enced business man would adopt, if required to manage the schools of a city as a private interest; and they comprehend the most essential provisions of the best systems of schools in operation in cities, either at home or abroad.

FREE TEXT-BOOKS.

The cost of text-books used in the public schools of this State is, probably, between two and three millions of dollars annually. This is felt to be an onerous tax by the patrons of our schools, and inquiry is frequently made as to whether it cannot be lessened. The burden rests most heavily upon the poorer classes, and instances are not unfrequent where children have been kept out of school because their parents were unable to purchase books for them. Various expedients have been adopted to obviate this state of things, some of which may be mentioned.

It has been alleged that the cost of text-books is greatly increased by the frequent changes in them, brought about by agents and other interested parties, and laws, with heavy penalties attached for their violation, have been passed to check the evil. Such laws have accomplished little good in the direction intended, for the reason that the changes in text-books, which they were designed to prevent, do not take place nearly so often as is generally supposed—not more frequently, on an average, throughout the State, than once in eight or ten years. The expense, which these laws were passed to prevent, is, in great part, due to the demand for new books naturally created, as children pass from the lower to the higher classes of a school, and to the wearing out of the books themselves.

Boards of directors have sometimes made provision for furnishing books to the children of poor parents unable to procure them. This has been allowed, but it is of doubtful legality. It seems to violate the fundamental principle upon which our school system rests, that of the perfect equality in privileges of all the children attending a public school.

Text-books have been bought by boards of directors, in certain districts, at wholesale rates, and sold to the children in the schools at cost prices. The law gives no sanction to a transaction of this kind, and although, in particular cases, it may be a saving of money, should the practice become general, it would be liable to abuse.

Some disinterested people, and many not so disinterested, have thought the State might engage writers to prepare a uniform series of text-books for all the schools, or to procure the copyright of such a series, from outside parties, and publish the books and furnish them at low prices. There are, however, very serious objections to the adoption by the State of one kind of books and to their compulsory introduction into the schools to the exclusion of all others; and, apart from this, the establishment of a great State "book concern," to publish and send out text-books, to the value of millions of dollars annually, would be to create an evil many time worse than the one those who complain of the cost of the books they buy for their children, are trying to escape.

On the whole, there seems to be no better way of treating this subject of text-books, than for boards of directors to furnish them as they do school apparatus and appliances, free to all pupils attending the schools. This plan has several very obvious advantages: It lessens the cost of the books one-third, if not one-half; it secures perfect uniformity of books in each school district, and, consequently, complete classification of the schools; it saves the expense of purchasing new books upon changing residence from one district to another; it does away with the invidious distinction that is apt to prevail among the pupils of a school, where some procure books at the public expense, and others provide them at their own, and it enables teachers to advance their classes when prepared, and to introduce new studies without meeting the difficulties usually thrown in their way when additional books are to be purchased. These are important advantages.

It may be objected to the plan of free text-books, that it adds to the already large expense of our public schools, that it increases the labors of unpaid boards of directors, and that books so furnished, being public property, are liable to be injured or destroyed.

The answer to the first of these objections is, that if it increases the expense of the schools, as met by the boards of directors, it decreases, in much greater proportion, their expense, as met by the people who pay the taxes. As to the second objection, it may be said, that the procuring, distributing, and taking care of the books, should be attended to by an agent of the board, who can be paid for the work. And the last named objection has no force, when it is known, that in every place where the

plan has been fairly tried, it is found that children can be taught to take at least as much care of the district's books as of their own. Teachers, of course, must be required to give a receipt to the board for the books they use, and to return them in reasonably good order.

Philadelphia has furnished books to the schools, with other supplies, for many years, and all the leading school men of the city approve of the plan. Books are also furnished free in a considerable number of school districts in different parts of the State, and in them all, so far as is known, the plan meets with general approval. The same is true of many places that might be named outside of the State.

As it is somewhat doubtful whether the law, as it now stands, gives school boards the legal right to purchase books, to be furnished free to all the pupils in the schools under their control, I recommend the passage of a law, allowing them to use their discretion in the matter.

NORMAL SCHOOLS.

The following paper will show how the money appropriated by the acts, approved April 18, 1877, was distributed by the commission therein appointed, among the several State Normal Schools, and the conditions imposed upon them:

HARRISBURG, September 29, 1877.

The undersigned, directed by the Legislature to distribute the money appropriated to the several State Normal Schools, by the acts of 1877, have agreed to apportion the amount as follows:

Of the $100,000, $30,000 is given to the school at Indiana, $25,000 to the school at Shippensburg, $20,000 to the school at California, $15,000 to the school at Mansfield, and $10,000 to the school at Bloomsburg.

Of the $75,000, $10,000 is given to each of the schools at Millersville, Edinboro', Kutztown, West Chester, and Lock Haven; and $5,000 to each of the schools at Indiana, Shippensburg, California, Mansfield, and Bloomsburg.

The money to be payable, subject to the provisions of said acts, by warrants on the State Treasurer, issued by the Superintendent of Public Instruction—one-half when the authorities of the several schools, in a legal and binding manner, agree to comply with the conditions of such distribution hereunto appended; and the other half, when satisfactory evidence is presented, showing that said conditions have been in good faith complied with.

The following are the conditions, upon a compliance with which the sums of money above named will be paid to the several State Normal Schools:

1. That mortgages, as heretofore, in favor of the State, be executed upon the property of each of the several schools, to the amount of the sums herein assigned it.

2. That the schools at Indiana, Shippensburg, California, Mansfield, Bloomsburg, and Lock Haven, be required to devote the several amounts herein appropriated to them, to the payment of their present indebtedness; and that, for this purpose, the friends of said schools be required to add to these sums twenty per cent. of their amount from private sources, subscriptions, or releases of creditors.

3. That the schools at Millersville, Edinboro', Kutztown, and West Chester be required to make such additions to their buildings, grounds, or appliances, or to take such measures looking to the bettering of their condition, or to the increasing of their efficiency, as may be prescribed by the Superintendent of Public Instruction, and approved by this commission.

4. That in case any school shall decline to accept these conditions, the money it would otherwise receive shall be divided equally among the remaining schools.

The undersigned, in this connection, also desire to state:

1. That in assigning the bulk of the money appropriated by the Legislature to the schools most deeply in debt, they have conformed to what they knew to be the intention of the Legislature.

2. That any further increase of the debt of a State Normal School, either by an accumulation of interest or by expenses incurred without money to pay them, will tend to weaken the whole work of normal instruction in the State, and should be carefully avoided. The income of each should, if possible, be made to meet its expenditures.

J. F. HARTRANFT, *Governor of Pennsylvania.*
GEORGE LEAR, *Attorney General.*
J. P. WICKERSHAM, *Supt. Public Instruction.*

The purpose of the conditions imposed by the commission is sufficiently obvious, but some explanation may be needed as to the reasons that governed them in making the distribution. The controlling reason was the safety of the schools. The schools that received the largest sums were heavily burdened with debt, and there was literally no way of keeping them out of the sheriff's hands, except to grant them liberal State aid. It is to be remembered, also, that the schools most endangered possess the finest buildings of the kind in the State, liberal citizens had contributed largely to erect them, and the State itself had over $200,000 built up in their walls. If all this would not have more than justified the action of the commission, let it be added, that even the schools most crippled, financially, were in a flourishing condition, both as to the number of students in attendance, and the efficiency of the instruction imparted. Under such circumstances, it was thought, to allow them to be sold for debt, destroyed, would be to bring disgrace upon own whole Normal School system. It was the intention of the Legislature to prevent such a calamity, and the commission carried into effect that intention, not doubting that, when protection

was secured to the weak schools, future appropriations would be made to strengthen the stronger ones. Besides, the schools receiving the largest sums, were required to raise from private sources, towards the payment of their indebtedness, twenty per cent. of the amount allowed them by the State.

It is sometimes objected that we have too many Normal schools. If the objection is well founded the law of 1857 is at fault, and not the liberal citizens who have established them. The law provides for twelve schools, and twenty years have now elapsed since its passage, and there are but ten. But the objection is not well founded. The demand for teachers is so great among us, that all our Normal schools can be filled with young persons of great promise desirous of preparing themselves for the work of teaching.

Besides, in proportion to population, Pennsylvania has fewer normal schools than the most advanced common school states in this country and abroad.

It is further objected that the buildings recently erected for normal school purposes are too large and costly. If so, it is again the fault of the act of the Legislature providing for their establishment. There is not a single school in the State, that, in the size of its buildings, or in the manner of its equipment, has gone beyond what the law requires. Some of the older schools were recognized without a full, or anything like a full, compliance with the law in the matter of buildings; but those that were established later, fearful that they might not be able to pass the inspection of the State officers, in the same easy way, built more largely, and consequently, involved themselves more deeply in debt.

The flush times, immediately preceding the present financial depression, did, without doubt, induce public-spirited citizens to undertake, rashly, the work of erecting buildings for normal schools, as well as to engage in other venturesome undertakings; but while there may have been some extravagance in expenditures, on the part of the authorities of certain normal schools, their accounts show that there has been no dishonesty. When the members of the Legislature make an appropriation to normal schools, therefore, they may rest assured that the money will be applied as intended, and will go to aid some of the best men in the Commonwealth in perfecting an enterprise of great public interest.

It must now be added that it is universally admitted, by those experienced in such matters, that normal schools are an essential part of every public school system. There cannot be good schools without good teachers, and there cannot be a body of good teachers without normal schools in which to prepare them for their work. Pennsylvania has the foundation for a magnificent system of normal schools. She has ten schools in operation, under the act of 1857, in addition to the one in Philadelphia, supported by the city. The attendance at the State schools, the past year, not counting pupils in the model schools, was two thousand seven hundred and seventy. The value of their buildings and other property is estimated at $1,200,000. In aiding to establish these schools, the State has contributed, including the appropriations made by the last Legislature, $545,000. This amount is scarcely half the sum expended upon a single asylum for a few hundred insane people, and much less than half the sum spent in building one of our penitentiaries. It will take probably $250,000 to free them entirely from debt, and $250,000 more to supply the needed additional buildings and appliances. It would be good policy to make these appropriations. The State can spend the amount of money required for no other purpose that will better subserve her highest interests.

If $500,000 could be appropriated, payable in installments during the next three or five years, there would be no pressing need for further appropriations. The schools, thereafter, if well managed, could be made self-sustaining; the money already expended, both by the State and private individuals, would be made secure, and conditions could be enforced upon the schools greatly promotive of their efficiency. All students, but those preparing to teach, could be excluded, the standard for graduation could be raised, the course in the science of teaching could be greatly extended, needed apparatus, libraries, and appliances could be supplied, the schools for practice could be made models in every respect, the public schools could be furnished with teachers skilled in their profession, and Pennsylvania would have a system of normal schools unequaled in the United States, if in the world.

ELECTION OF SUPERINTENDENTS.

The election of superintendents of schools in counties, cities, and boroughs will take place on the first Tuesday of May next. It is hard to estimate the importance of this

election. "That is the best system of schools which is best supervised," has become a maxim among experienced educators all over the world. All the foremost educational countries of Europe, Prussia, Holland, Switzerland, Sweden, have a close and careful system of supervision, extending from officers who watch over single schools up to the Minister of Public Instruction. Such a system is simply the application of the principles that are observed by successful business men, in conducting large operations of every kind. Our railroads, mines, mills, manufactories, all have their systems of supervision. An army has grades of officers, from corporal up to commander. Without some such organization, good schools are, as a rule, impossible.

Incalculable as has been the benefit derived from it, there might be a much more perfect system of school supervision than that we have in Pennsylvania; but the people may not be ready for such a change, if it should involve, as it would, additional expense. To make any system of supervision effective, it is necessary to have competent officers. Ever since the county superintendency was adopted in this State, twenty-three years ago, the office has improved the schools, and been popular among those qualified to judge of its workings, wherever the right men have held it, and opposition to it has been mainly confined to sections under the control of officers lacking in one or more of the qualifications for such a post. Any legislation that will aid boards of school directors in selecting the best men for superintendents, whose services they can procure, at the approaching election, will be appropriate and timely.

A change in the law, relating to the election of county superintendents, restricting each school district represented in the triennial convention, or each ward of a consolidated district, to a single vote, and authorizing that vote to be cast by a delegate elected for the purpose by the directors of such a district or ward, whose expenses in attending the convention should be paid, would do away with certain evils that now exist in connection with these elections, and be an improvement in many ways.

The salaries of the superintendents, like the salaries of the judges of our courts, and of other officers, should be fixed by act of Assembly. As fixed now, by popular vote of the conventions of directors, they are arbitrary, unequal, subject to caprice and prejudice, and in nowise proportioned to the size of the counties or the work to be done. Arguments in detail, on this subject, have been presented in former reports, and they need not now be repeated.

With a fair salary attached to the office, the superintendents of schools should be prohibited from carrying on any other business that will interfere with the full performance of their public duties.

HIGH SCHOOLS.

The opinion is still held by some, that the course of instruction in the public schools should be confined to the elementary branches, such as reading, writing, and arithmetic. Possibly, the more liberal of this class of persons would be willing to include something of geography, grammar, and history; but all are opposed to any provision for grading the schools that involves the establishment of high schools or departments for higher instruction.

Objections to high schools are based principally upon the following grounds: First, that the legislature, in establishing public schools, never contemplated an extension of the course of study in them beyond the elementary branches; second, that the high schools benefit the few who can afford the time and expense of attending them, while the many, who are not thus favored, although taxpayers, are denied their advantages; and, third, that such schools are a very expensive part of the system, and the money they cost could be better applied in improving the lower schools. Back of all this, too, there may be the secret assumption, so common and so openly expressed among the aristocracy of the Old World, that any education on the part of the poorer or working classes of society, beyond that which fits them for the discharge of the simple duties of their limited sphere in life, is rather a curse than a blessing to them.

That these grounds of the objections to high schools are not tenable, will appear from a brief statement. The framers of our school laws certainly showed that it was their intention to have the higher branches taught in the public schools, by making provision for grading them; by enacting, in direct words, that the course of study in the public schools shall consist of the elementary branches, and "such others as the boards of directors or controllers may require;" and, by directing the establishment of schools for "every individual above the age of six and under twenty-one years,"

without regard to the branches he might be prepared to study.

It is true, that but a comparatively small number of children attend the high schools of our cities and towns, but, wherever well managed, their uplifting, inspiriting influence is felt in every school of lower grade, and by every pupil. The high school is the sun that gives light, and heat, and quickening power to the whole system, of which it is the centre. Besides, the few in a high school, are the choice spirits who push themselves up from among the many, the capable, the ambitious, the enterprising, the God-gifted, those who are destined to be leaders in society. They are not the rich alone, by any means, but rather the talented, aspiring sons and daughters of people in moderate circumstances. Break up our high schools, and you take away all chance of advancing beyond the mere elements of learning, from three-fourths of all the young men and women, who now attend them. The Chinese prevent the growth of the feet of their female children with iron shoes. Such barbarism is certainly no worse than that which would stop the growth of mind, dwarf the whole higher nature, made capable of infinite development by the hand of God himself.

High schools *are* expensive. We admit the fact. A pupil in a high school may cost several times more than one in a primary school, if we charge high school pupils with the whole expense of the high school. But to thus charge them is clearly unfair, for, as above shown, the good done by the high school is distributed over the whole system, of which it is a part. The high school can be used to give life, and power, and efficiency to the whole educational machinery, and, of course, its cost will be in proportion to its value.

No wonder the sentiment is not openly expressed as against high schools, that they furnish an opportunity to the children of the poorer classes that prompts them to an effort to better their condition, to enlarge their sphere of action, to rise in the world, for the sentiment itself is un-American, and the man who entertains it should seek a home in a monarchy rather than in a republic. It is the glory of free institutions, that they make the chances of success in life as nearly equal as possible, and as the most powerful agency in promoting that end is the public high school, no true lover of these institutions would strike it down.

The positive argument in favor of high schools is, that they are needed to complete a system of public instruction; that the beneficial influence they exert upon lower schools is worth all they cost, and that a State has no more need of citizens who can simply read and write, than it has of citizens who have some learning, some culture, some weight of character.

There is no purpose that is answered by a lower school, that is not better answered by a higher one, and the right policy, in regard to a common school system, is to lay a strong foundation, and then build upon it as high as is practically possible.

And here it may be proper to correct a wrong inference, sometimes drawn from the statistics of our prisons and penitentiaries. It is found that a considerable majority of the criminals incarcerated in these institutions have attended public schools, and can read and write. "A sad commentary," says a thoughtless writer, "upon our public school system." These bad people, doubtless, attended, in their youth, a public school, just as they probably attended a Sunday-school, or went to church, but, if inquiry were made, it would appear that they did neither for a length of time, or in a way to be much benefited. Nobody, who understands the matter, ever claimed that the mere mechanical facility in reading, writing, and ciphering can do much towards the forming of a proper moral character. To do this, there must be long-continued training, favorable surroundings, culture, the rooting out of bad and the putting in of good. Something in this direction can be done in the short course of an elementary school, but the years of the high school life furnish the fit opportunity of inculcating the principles that are proof against temptation and the virtues that adorn the citizen. By the fruit thus produced our public school system should be judged.

CHILDREN OUT OF SCHOOL.

Statistics, showing that large numbers of children, of school age, were either not in school at all, or attending so irregularly as to be of little use to them, were presented in former reports. The evil has grown no less, and it seems likely to increase, unless effective measures be soon taken to check it.

School boards have not exhausted all the means of bringing children into school not now attending, within their reach. Sufficient school accommodations are wanting in some places. In others, the schools, themselves, are so conducted as to present

little attraction. Neither directors nor teachers, as a general rule, go to the trouble of ascertaining what children are out of school, or what measures can be used to bring them in. Committees of benevolent citizens, men, or women, have been organized in the wards or precincts of but few of our cities, whose special object it is to look up children who ought to be in school, provide them with suitable clothing and books, and see that they attend. I do not know of a single city or town in Pennsylvania, whose board of school directors has deemed it a duty to appoint an agent, a kind of official missionary, as in some of the New England cities, whose duty it is to seek out the children who do not go to school, or who are playing truant, visit their parents or friends, and use all the persuasive effort possible to have them attend school, and enter upon a proper course of instruction. Special schools or homes of an industrial character have been nowhere established by the public school authorities for children who are homeless, friendless, or unfit to be associated with the children in the public schools. All of these things can be done without any further legislation; and, if done, none can fail to see they would go far to cure the evil of non-attendance at school, and consequent ignorance.

I have not favored for Pennsylvania compulsory educational laws, like those in operation in the Old World. They are unsuited to our institutions, and to enforce them would require the establishment of a large force of special officers, armed with the requisite authority. Besides, fines and imprisonment, inflicted on parents, do not furnish their destitute children with the needed shelter, food, clothing, books, etc., to fit them for a place in the school-room. That thousands of children should grow up among us in ignorance and vice is a dreadful evil; but the experiment of compulsory laws in this country, has left it almost untouched in every State where it has been tried. There is, however, a pressing necessity for something to be done, and, after much consideration, I have come to the conclusion, to recommend the passing of a law with carefully guarded provisions somewhat as follows:

1. Making it the duty of boards of school directors, especially in cities, by means of agents or otherwise, to use all proper efforts to have every child of suitable age belonging to their several districts attend school, or enjoy in some way the privilege of obtaining an education.

2. Giving power to the school boards of each district to order the arrest of every child within their jurisdiction found to be an habitual truant, a vagrant without home or friends, or one whose parents or friends are unable or unwilling to feed and clothe him properly or to give him an education; and after an examination before an alderman, a justice of the peace, or some other proper officer, as to the alleged facts of the case, to have him admitted at the county home for friendless children.

3. Providing that in case the parent, guardian, or person having charge of a child arrested for truancy, vagrancy, or non-attendance at school, is pecuniarily able to care for him, and educate him, as the law directs, but has neglected his duty in these respects, he may be fined; and if the child be sent to the home, he may be compelled to pay a part or all of the expense. A written promise, with security, from parent, guardian, or other responsible person, to thereafter perform his duty to the child in all respects named, may secure his release for a first offense.

4. Requiring every county, or district, where two or more counties have been combined for the purpose, to establish and support a county home for friendless children, to be under the control of the directors or overseers of the poor, but not to be located near to, or connected with, the alms-house, to which all destitute children, and all children arrested for truancy, vagrancy, and non-attendance at school, shall be sent and cared for, instructed, trained to habits of industry, and apprenticed, under proper regulations, at the earliest possible age. The districts above referred to might be constituted by the Board of State Charities, and the plans of buildings for the homes might be furnished by the same authority. Philadelphia would need several homes of the kind, and provision should be made accordingly.

5. Securing the enforcement of the laws now existing in reference to the employment of young children in or about mines and in factories, shops, or mills, or making such amendments to the laws as to render them more effective.

The plan of treating the evil under consideration, above outlined, has been shaping itself, in my mind, for some years. It is an expansion of what has actually been begun in some counties. Lancaster county has a children's home, mainly supported by the county, and to which all children belonging to the alms-house are sent. A number of

other counties have homes for friendless children, supported by private benevolence. Many that do not have them, need them very badly. Alms-houses are the worst places in the world for children. By the plan proposed, not only would a suitable place be provided for children in the alms-houses, but good homes would be secured for the thousands of ignorant and vicious children that are fast becoming a curse to society. The plan carried out would cost much money, but it would save more—save it in constables and policemen, in the criminal proceedings of courts, in jails, prisons, and poor-houses. The evil, for which a remedy is sought, is so great that I can hardly be too urgent in asking the attention of the Legislature and the people to the subject.

EDUCATION FOR WORK.

I am not of the opinion that any education our youth may receive at the public schools, *per se*, creates a distaste for labor and a disposition to seek some way of obtaining a livelihood without resorting to work that must be done with the hands; but the education they thus receive, coupled with the misdirected counsels of parents and friends, and the false opinions generally prevalent as to the relative position in the social scale occupied by hand-workers, and those who work in some other way, or live without work of any kind, evidently tends in this direction, and is threatening great danger to our material industries, as well as to society itself. The question as to the best thing to be done to counteract this tendency, has been again and again presented in the annual reports of this Department, and all possible light thrown upon it. The educational exhibits of several European nations, at Philadelphia, bearing upon this subject, were studied with much care, and the results published in the report of last year. Theoretically, the necessity of some better provision for industrial education in this country is so obvious that no one who has given the subject attention, can doubt it; but the problem that remains unsolved is the kind of schools to be established in which to impart this instruction, and the ways and means of establishing them. Much attention has been given to this problem, but it has not yet been so clearly worked out that I feel prepared to ask for positive legislation on the subject. The progress, however, made in the investigation, may be briefly stated.

Higher technical education is reasonably well provided for in our State. True, we have no such great institutions devoted to this purpose as exist in several countries of Europe, but the technical and scientific departments connected with several of our universities and colleges, are highly creditable now, and capable of development in proportion to the demand for this kind of instruction. In addition, we have the Polytechnic College, at Philadelphia, and the State College, in Centre county, whose courses of study are mainly technical in their character, as well as a number of auxiliary institutions and agencies working in the same direction. Doubtless the time will come, when many of these scattered efforts will be concentrated in one grand institution like that at Moscow, or that at Zurich, but for this our country is not yet prepared, and we must wait in patience.

The elements of drawing can be taught, and ought to be taught, in all our public schools, and something of the subject beyond the elements should have a place in the courses of study in all our grammar and high schools. This done, and one great step would have been taken in the direction of industrial education; for drawing, rightly taught, is the foundation of all systematic efforts in this direction. More of the practical and less of the theoretical, more of concrete science and less of abstract definitions and theories, would also conduce to the end in view.

In all European countries there are large numbers of schools devoted to teaching some special trade or kind of business. They are adapted to pupils of both sexes, and of different ages, and, in most cases, they are either supported partially or wholly by the government. Of this class, are many schools which give instruction in the different branches of agricultural, mechanical, manufacturing, and commercial industry; art schools and schools of design; schools of weaving, lace-making, needlework, wood-carving, marble and ivory-cutting; schools to teach the making of baskets, mats, toys, glassware, &c., &c. The little country of Wurtemburg, in Germany, alone has fifty schools of this character. Other countries, large and small, are equally well provided. But in this matter of special instruction, we shall not soon imitate the nations across the sea; and when we do establish such schools, in accordance with the spirit of our institutions, it will most likely be done by corporations or individuals, and not by the State.

There is in Europe another class of industrial schools, which, with some modifications, may, with great advantage, be introduced into this country. They are admirably adapted to our social condition and industrial wants, and they can, without any great difficulty or expense, be incorporated into our system of public instruction. They may be called *work-shop schools*. They are schools, and shops or working-rooms combined, and the pupils study the ordinary branches of learning part of the time, and are employed in the shops or working-rooms the remaining part of it. In the shops, they are supplied with all needed tools, and, under skilled master-mechanics, are taught to work as carpenters, blacksmiths, metal-workers, masons, stone-cutters, cabinet-makers, wood carvers, painters, printers, etc. One of the best of these work-shop schools is the one at Rotterdam, in the Netherlands. This school had a fine exhibit at the Philadelphia Exposition, which was described in the last report of this Department. It is claimed by the friends of this class of schools that the pupils attending them make about the same progress in their studies as others, possessing like advantages, who do no shop-work.

Assuming that the time has about come when some systematic effort must be made by the public authorities to educate our young people for work, and believing that something after the plan of these European work-shop schools is best suited to the purpose, an attempt will be made to point out the steps that must be taken to establish such schools among us, and what difficulties lie in the way.

Special provision for industrial education is not greatly needed in the rural districts. Their parents generally find employment for their children when the schools are not in session, which, on an average, is several months in the year; and, in all well regulated households, children attending school are kept busy during their nights and mornings at home. Industrial instruction when imparted in this way, is more effective than any that can be given in a school. A wise parent can train his child better than any one else to habits of industry, and to regard the attainment of skill in work as an end not only honorable in itself, but worthy of the highest ambition.

Work-shop schools, then, are needed at the present time only in our cities and large towns. To establish them it will be necessary to provide suitable rooms for shops, tools, teachers, and courses of study. At first thought, it would seem that such additions would add largely to the expense of our system of public instruction; but, upon consideration, it will be found that this need not be the case. If we assume that it would be more profitable, as a preparation for life, for the children in our public schools to spend one-half or one-third of the time now occupied in the study of the ordinary branches pursued in such schools, in forming habits of industry, a taste for work, and acquiring skill in the fundamental operations and principles of different arts and trades, there is little doubt, that the money saved in what would then be dispensed with, would pay the expense necessary to fit up and run a working department.

In the primary schools, or with young children, no special rooms or teachers are needed for industrial purposes. The drawing, modeling, sewing, &c., &c., can take place after the manner of a kindergarten, in the same rooms and under the same teachers provided for other exercises. The introduction of work into a course of study, in even a primary school, would involve some changes in furniture, apparatus and teaching force, but none of these would be attended with much expense.

For grammar and high school pupils, there would have to be provided either separate buildings to be used as workshops, or rooms in existing school-houses would have to be fitted up for the purpose. The latter mode would, in most cases, be the least expensive, for the rooms for work would then take the place of those now used for ordinary recitation purposes, and the instructors in the industrial department would simply step in where teachers, now employed, stepped out. The practical effect of such a change would not be to increase, materially, the expense of our schools, but to substitute work as a discipline, and manual skill as an end, in place of so much arithmetic, grammar, and other branches of an abstract character. While some classes would be in the shops at work, others would be in the recitation rooms reciting their lessons, and still others, perhaps, in the school-room engaged in study. Some of our high schools, now, have laboratories, in which classes of students, at stated times, make experiments in chemistry. A work-room of the kind, now contemplated, would bear a similar relation to the school.

The work done by pupils, in the industrial departments of our schools, must be

mainly disciplinary and artistic. The aim should be to form habits of industry, to create a taste for work and the ambition to excel in it, and to impart a degree of skill that may be turned to practical account, in learning trades, or in actual business. The work-shop schools of Europe, generally, make work for sale, and pay a portion of their expense in that way; under the plan now contemplated this would, for the most part, be impracticable and undesirable. Provided with proper materials and tools, the pupils would commence and follow out a series of well-graded, logical steps, towards the end desired to be reached. All the elementary operations, essential in the working of wood, stone, iron, brass, etc., can thus be taught. This kind of work is an education in itself. For the purpose of giving a practical illustration of the proceeding, I take the following description of the organization of the vise-shop, for teaching the arts of chipping, filing, etc., at the Massachusetts Institute of Technology, from President Runkle's last report:

The shop contains four heavy benches, each eighteen feet long, three feet wide, and two and one-half feet high. To each bench eight vises are attached. It was supposed that one teacher could instruct thirty-two students at a time, and this has been found to be about the right number. At the beginning of the course it is quite enough, but later, when the students have acquired some skill and independence, a larger number might be successfully taught. As an experiment, we have adopted for this course thirty lessons, of four hours each, giving three lessons per week, which is certainly enough for the mechanical engineers, and probably, also, for the class in the new "School of Mechanic Arts," at first called the new course in practical mechanism. At each vise there are four drawers, each large enough to hold all the tools needed by the student at one time; so that, four sections, of thirty-two each, can take the course simultaneously. This shop has, then, a capacity for teaching the course to one hundred and twenty-eight students every ten weeks, and to six hundred and forty in a year of fifty weeks.

The next step was to devise the proper series of designs, to teach the use of the various forms of files and chipping-chisels, used in any branch of the art, and with a range wide enough to cover all probable applications. At this stage, the services of an expert were needed, and we were most fortunate in finding in Mr. Valentine Wallburg, a man who had spent twenty-five years in applying his art skill in various trades, and who had, moreover, the ability to comprehend the unity involved in the details, which he had spent so many years in applying. Each piece is designed to teach a definite idea, and to be put into the course when the student has acquired the requisite skill to work it. As the class system is to be followed, the element of time must be the same for all. The teacher is required to solve each piece in advance of the class, to find the time it will take, having also, to settle clearly, in his own mind, the best method of solution, with the reasons why. At the beginning of a lesson, the teacher must be able to assign the time to be given to the class, to solve this piece, to show them what it is intended to teach, and to give them the method of solution, with the reasons therefor. These points settled, and all needed directions having been given, all proceed to do the same work, and the teacher's time and energies are all devoted in directing and watching its progress. When the assigned time has expired, all the pieces are called for inspection, in accordance with an analysis, which has previously been posted, assigning marks to each element for perfect workmanship. These marks add up one hundred, the same given for perfection in other studies.

The student, by carefully studying the analysis, is able to work, not at a venture, but with knowledge, for the highest marks, and thus his capacity to judge of the quality of work fully keeps pace with his ability to perform it.

We are thus developing the mechanical judgment of the student, by making, in advance, a careful study of the methods of solution, as well as the manual skill to perform, and the ability to judge of the quality of work at the same time. The course in mechanical drawing, which keeps pace with the shop work, and the parallel lecture-room course upon the same art, with its applications in construction, completes the instruction.

That so much skill of hand could be acquired in one hundred and twenty hours' practice, has been quite as great a surprise to mechanics as to others, and I am glad to be able to say now, from our own experience, in which I am joined by all, with hardly an exception, that the system is a triumphant success.

A room for vise-work is not more cheaply provided, or the work itself more easily organized, than rooms and work in the other industrial departments that might be connected with a school, or a system of schools; and I am satisfied that as much real skill can be acquired in a well-managed workshop school, in carpentering, cabinet-making, stone-cutting, printing, &c., &c., in six months, as can be acquired under the system of apprenticeship, as it at present exists, in two, perhaps, in four years.

An experiment of a school for work, with children about the average age and requirements of those attending our secondary or grammar schools, was made by some gentlemen in Boston, in the winter of 1876–77. The room was fitted up with work-benches, giving each boy a space for work four feet in length and two and a half feet in width. Each bench was provided with a vise, with common wooden jaws and an iron screw, and a drawer, with lock and key, in which the tools were kept. Thirty-two boys, of from twelve to sixteen years of age, were admitted, and, as the school was open only in the evenings, some of them attended public school in the day-time. A course of twenty-four lessons in

wood-carving was prepared, with special reference to securing the greatest amount of instruction with the least expenditure for tools and materials. The tools used were the flat chisel, the gouge, and the veining-tool, or small gouge. Smooth blocks of white wood, six inches long by two or three inches broad, and one and a half inches thick, were the material used for work. The course consisted of twenty-four lessons, intended to teach the elementary processes of wood-carving. "The object of the school," says the committee, in their report, "was not to educate cabinet-makers, or artisans of any special name, but to give the boys an acquaintance with certain manipulations, which would be equally useful in many different trades. *Instruction*, not *construction*, was the purpose of the school. After the blocks were finished, they were placed in a rack, on one side of a room, and each boy's progress could be seen by consulting these specimens of his work. The blocks were prepared by the teachers before the school opened. If another term of instruction could have been given, the boys would have been taught to prepare the blocks themselves. Those of them who had been trained in industrial drawing, in our common schools were perfectly competent to make their own patterns. As an illustration of this, one of the teachers said that he took some of the patterns from the drawing-books of his own child, who was a scholar in one of the public schools. Does not this incident show the natural sequence of such a course of hand-culture, as we have been describing, upon the education in drawing now prevalent in our common schools?

"One such work school as we have described might furnish four hours instruction every week for one hundred and ninety-two boys, or if evenings were added, for two hundred and eighty-eight boys. This is more than the number of pupils between the ages of twelve and sixteen, found in our grammar schools. We cannot but believe that it would be easy to establish, in connection with all our grammar schools for boys, an annex for elementary instruction in the use of the half dozen universal tools, viz.: the hammer, saw, plane, chisel, file and square. Three or four hours a week for one year, only of the grammar school course, would be enough to give the boys that intimacy with tools, and that encouragement to the inborn inclination to handicraft, and that guidance in its use, for want of which so many young men now drift into overcrowded and uncongenial occupations, or lapse into idleness or vice."

Boards of school directors have now, under our laws, full authority to establish these work-shop schools, and to do so seems to me to supply a much-needed want in our system of public instruction. Still, I do not urge action in such an important matter without due caution. Let some enterprising school board first make an experiment. The expense of this will be trifling. The experiment at Boston cost, all things included, less than $800. If successful, something may grow out of it that we can engraft permanently upon our system of public schools.

HISTORY OF EDUCATION.

The Centennial Exposition naturally turned public attention back towards the past. In bringing together, for use on that occasion, a few facts, marking the progress of education in the State, it was seen that much valuable information of the same kind might be had, if pains were taken to hunt it up. Several reasons determined me, with the aid of the superintendents of schools, in the various counties and cities of the State, to undertake the work of compiling a complete history of education, both public and private, from the first settlements on the Delaware to the present time. One was, the value of such information in itself, and the light it would throw upon what is now being done, and what remains to be done, in the future, for the cause of education among us. Another was, that many of the most important and significant facts, which should find a place in such a history, were to be found only in perishable documents, or the memories of old men, and every year increased the danger of their being altogether lost. And, still a third, was that the end of the first hundred years of our existence, as an independent nation, prepared men's minds for a retrospect of the past, and disposed them to be more appreciative of the doings of the generations that have passed away. Sure of the active co-operation of the county and city superintendents of schools, in all parts of the State, a circular was issued, dated January 3, 1877, requesting, instead of their usual annual reports, the preparation of a sketch of the history of education in each county and city, covering the whole State, except Philadelphia. The following is a copy of the circular. It was, subsequently, somewhat modified, as to the limits of the sketches.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, January 3, 1877.

To County, City, and Borough Superintendents:

GENTLEMEN: In place of the usual annual written report made to this department, you will this year prepare and forward an historical sketch of education within your several jurisdictions.

In no other way, it is thought, can so much be done at this time for the cause whose interests have so largely been intrusted to your hands. The sketches should be *accurate*, giving names and dates: *full*, embracing all of public importance relating to the subject; *concise*, omitting all unnecessary details and comments. Compiled in a volume, these sketches, containing, in brief, the history of education in every county, city, and borough of the State, will constitute a document of great interest and value. It is hoped that every school officer addressed will consider himself personally responsible for the success of this plan of doing a much-needed work, and will at once set about collecting material, in order that no part of the State shall be allowed to suffer from any official procrastination or neglect.

Each sketch should include whatever it may be proper to say upon the following topics:

1. *The Earliest Elementary Schools.*—When and by whom established. How supported and managed. Their character. The teachers.

2. *Elementary Schools up to the time of the Passage of the Common School Law, in 1834.*—The condition of the schools. The effect of the laws relating to education, passed prior to 1834. Schools founded and supported by churches. Efforts, if any, to secure free schools.

3. *The History of Common Schools since 1834.*—The growth of the system. Prominent school officers. Leading teachers. Work done.

4. *Academies, Seminaries, and Noted Private Schools.*—When and by whom founded. Full lists of all, whether now open or not, with all important facts. The county academies. Aid received by them from the State. Disposition of buildings.

5. *Colleges and Universities.*—History of all institutions of this kind, whether now in operation or otherwise. Present condition. Statistics.

6. *Miscellaneous Educational Institutions.*—Libraries, literary, and scientific societies. Clubs for mutual improvement. Special schools of all kinds.

7. *Teachers' Institutes and Associations.*—Meetings of teachers. Meetings in behalf of education. Benefactors of education.

The outline given above is not intended to be strictly followed, but to be merely suggestive. Each superintendent should arrange his facts to suit himself; but it is especially desirable, that he should, in some systematic way, cover the whole field of education in his district. It is known that, in some parts of the State, the amount of material to be collected is not large, while in others it is extensive and rich. The outside limits of a sketch is fixed at *twelve* pages of the annual report, but some of the Superintendents, it is thought, can compress all that need be said, into one-third of that space.

Yours respectfully,

J. P. WICKERSHAM,
Supt. Pub. Instruction.

The response to this circular, is to be found in the series of reports elsewhere published. Many of them have cost much labor, and are both historically and educationally of great value. We could name superintendents who devoted months of hard work to the preparation of their sketches. As a depository of facts, showing the past progress and present condition of education in a State, no such volume as this Report has ever been presented to the American public. All honor to the men whose contributions have made it what it is. The value of the book is so great that no apology need be made for its unusual size.

It was originally intended, that the report of the Superintendent of Public Instruction should also be of an historical character, a kind of general supplement to the reports of the county and city officers. Much time was spent in making preparation for this history, in reading books and manuscripts, making references and extracts, searching records, conducting correspondence, etc., and a large mass of material was collected. But the amount of this material finally became so great, that it could not be published, without either crowding out matter that the law requires to be placed in the hands of the Legislature, or swelling the report to such a size as to fill two volumes, instead of one. Besides, there still remained sources of information unexplored, and promises concerning contributions unfulfilled. Therefore, it was at last concluded to postpone the proposed task, and ask the Legislature to allow the preparation and printing of a special volume, treating at length of the history of education in Pennsylvania. This delay will give time to digest and generalize the facts contained in the reports of the superintendents of schools, herein published, to put in proper shape the material in hand, not embraced in those reports, and to explore any remaining sources of information, that may not have been exhausted; and thus a book can be prepared that will do justice to our fathers, in their efforts to provide for the instruction of their children, strengthen the cause of education in the State, and be a source of pride to every patriotic Pennsylvanian.

The omission of the contemplated historical feature of the report, gave room for the presentation of certain educational questions, just now of primary importance, and I trust they will receive due consideration, both at the hands of the Legislature and of the people.

J. P. WICKERSHAM,
Superintendent of Public Instruction.

NEARER, MY GOD, TO THEE.

LOWELL MASON.—"BETHANY."
SARAH F. ADAMS, 1848.

Reverently.

1. Near - er, my God, to Thee, Near - er to Thee! E'en though a cross it be
2. Though like a wan-der - er, The sun gone down, Dark-ness be o - ver me,

D.S. Near - er, my God, to Thee,

Fine. *D.S.*

That rais-eth me, Still all my song shall be,
My rest a stone; Yet in my dreams I'd be } Near-er, my God, to Thee,

Near - er to Thee!

3. There let the way appear
Steps unto heaven;
All that Thou sendest me,
In mercy given;
Angels to beckon me
|: Nearer, my God, to Thee, :|
Nearer to Thee!

4. Then with my waking thoughts
Bright with Thy praise,
Out of my stony griefs
Bethel I'll raise;
So by my woes to be
|: Nearer, my God, to Thee, :|
Nearer to Thee!

5. Or if on joyful wing,
Cleaving the sky,
Sun, moon, and stars forgot,
Upward I fly,
Still all my song shall be,
|: Nearer, my God, to Thee, :|
Nearer to Thee.

HOW GENTLE GOD'S COMMANDS.

H. G. NÄGELI.—"DENNIS."

Slow and Soft.

1. How gen - tle God's com - mands! How kind His pre - cepts are!
2. Be - neath His watch - ful eye, His saints se - cure - ly dwell:
3. Why should this anx - ious load Press down your wea - ry mind?
4. His good - ness stands ap - proved Through each suc - ceed - ing day;

Come, cast your bur - dens on the Lord, And trust His con - stant care.
That hand which bears cre - a - tion up, Shall guard His chil - dren well.
Haste to your Heavenly Fa - ther's throne, And sweet re - fresh - ment find.
I'll drop my bur - den at His feet And bear a song a - way.

[*Or this Hymn.*]

1. Heirs of unending life,
While yet we sojourn here,
O let us our salvation work
With trembling and with fear.

2. God will support our hearts
With might before unknown;
The work to be performed is ours,
The strength is all His own.

3. 'Tis He that works to will,
'Tis He that works to do;
His is the power by which we act,
His be the glory too.

Beddome, 1795.

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UNEXAMINED WORK OF THE SCHOOLMASTER.*

PEDAGOGICS ABROAD.—V.

IN order to be in a position to divide our work into the two parts,—the Examined and the Unexamined,—we must first frame such a definition of it as shall include all. The work of the schoolmaster, then, I define as all that is rightly called education. It is not mere instruction. This may be instrumental to the work, *not* the work itself. To see what the work is, we have but to glance at the objects of it,—at the materials on which we have to operate. We have to ask what are the needs of a child entering school, what preparation is required by a human being who has a living to earn and a future to provide for—what are the duties and responsibilities naturally belonging to the being who is "the heir of all the ages in the foremost files of time." We find in him intellectual powers, emotional susceptibilities, and moral faculties,—we find mind, conscience, heart, and will. These are in every child—they are the child. From whatever class of society the child may spring, its capacities are the same, the need for culture the same. These remarks, I am aware, are not new to you, they are the veriest truisms of the moralist and the divine. But often, as in the question before us, it is precisely on the most obvious truisms that the deepest truths are found to rest.

To repeat, then; there is in every child the power of thinking, reasoning, and imagining; there are the susceptibilities of loving and hating, of hoping and fearing, of sorrowing and rejoicing: there are desires and will; there is the susceptibility of self-accusation and self-approval. It is our privilege, the privilege of the members of the profession to which we belong, to labor to bring all this out—information and instruction being used as a means of enticement. The learning of facts cannot be education, for the child is not mere mind. Much more than these constitute education. A child is educated when the power of thought is so called out that the mind ceases to be dormant, when judgment is made to act in its proper sphere, when the feelings are taught to rise and fall under right influences, when desire for knowledge is constituted a constantly recurring appetite. Nothing below this deserves the name of education, for nothing less is the leading forth of what is in man. This is our work—the extent to which we carry it should depend only on our opportunity and ability.

Now, it will be evident to all that those printed papers of questions, requiring answers of a technical kind on paper, the setting of which constitutes what we call an examination, refer to but a small part of the work. In one sense all our work is examined—it undergoes a kind of trial by ordeal, the every-day trial and test of power and

*Paper read by Dr. Wormell, M. A., before the College of Preceptors, London, February 14, 1877.

character to which the objects of the work are subjected through life, and from which no man can escape. But for our purpose to-night, that work only will be called examined which is tested by means of definite questions answered on paper. Now, it must not be imagined that I am opposed to these examinations. I believe they are the soundest and fairest way of testing the possession of information. I have labored to pass examinations, and I must frankly admit that I have been assisted in gradually climbing to my present position in our profession by distinctions gained in examinations. Again, I have toiled at the task of carrying pupils through examinations, and still do so; but with all this, I have frequently been filled with misgivings that, looked at in reference to the higher functions of the schoolmaster, some of this work has been as barren of permanent and desirable results as if the time had been spent in engraving volumes on the sand of the sea-shore. Mere examinations occupy now less and less of my thoughts; and, while I am still trying to secure what good may be got from them, I am always thinking how to counteract the evil consequences which they naturally produce.

It will at once be seen that there can be but little sympathy between men who share these views and the man who is known as the private "coach,"—the man who exists *through*, *for*, and *by* the examination system. Too frequently has this man usurped the place of the schoolmaster, and we believe, greatly to the injury of the community. The educator should be one who has "dipped into the future far as human eye can see;" but the man whose whole time and thought, whose whole life is spent in cramming boys and youths with facts for production in an examination, has a vision so limited that its range sinks into insignificance compared with the extent of the work which the schoolmaster has to recognize. A person of this type is "not a desirable guide for man or beast."

In order to bring out the importance of the unexamined work of the schoolmaster, let us glance at some of the dangers and evils resulting from too exclusive attention to examinations.

In schools where this habit is found, a student is estimated solely by the rank he acquires in a table of marks, and it is by the same criterion that he is apt to estimate himself. He at last gets to regard all his work as designed only to enable him to pass, and looks on it exclusively with an eye to the use he can make of it in examinations. He thinks only of how best to arrange and re-arrange, condense and re-condense, and make an effective display on paper. Knowledge comes to be regarded, not as something to be sought for and valued on account of intrinsic worth, or as the means and instrument for the realization of lofty aims and noble purposes, but in a purely commercial spirit, a mercenary spirit, as a thing that *pays* in a certain specified competition. Hence he works like an isolated atom, as though he merely had certain selfish ends to attain—a habit which inevitably results in shutting up the scholar more and more in a world of ideas of a purely self-regarding nature.

But the business of the schoolmaster is to enlarge the boy's sympathies, and to extend his vision, so that he may at length arrive at the perception of the fact that the happiness of the individuals of a community is best secured when in every man the well-being of the community and the well-being of himself live and operate together as motives of action. The welfare of each man is best achieved by securing the welfare of all. The contrary proposition, however, more nearly expresses to the natural mind what seems to be true. "The immediate gain lies before it—can be seen and handled; and the law which demands its sacrifice in order to arrive at a wider and more prolific result appears to contradict the senses, and to bring ruin and no benefit in its train."

In this business of "coaching," a natural weakness of the untrained mind is confirmed and deepened, until susceptibility to higher motives is deadened, and almost destroyed. Such work is not simply unworthy of the schoolmaster, it is the direct reversal of his true work. The school where the master thinks and speaks of nothing but the examination, becomes sooner or later a mere "cramming" establishment. It may be necessary to say, I do not apply this term as a compliment. I know that some distinguished, pains-taking, and successful masters have recently spoken in favor of "cramming." But I feel persuaded that this fact arises from their attributing a different meaning to the term from that in which I accept it. It is not a word with so fixed a meaning that we understand the same thing by it. We get at its present use, I suppose, from the analogy between food and instruction. But the analogy is not complete. The Strasburg goose is crammed up to his death, not so the examination competitor. The

former is not expected, after having acquired an abnormal liver through being crammed, to strut about and perform all the functions of a goose; but the latter is expected to survive the cramming, and somehow or other, in spite of it, to become a useful member of society. Men have sometimes undergone a vicious system of training, and have become great in spite of it, and their success in life has prevented others from recognizing the evils of the system.

It is easy, therefore, to understand how it is that teachers answer differently the questions, "What is cramming?" and "What are the results?" We have often to put into the memory—to cause to be learnt by heart—things which the pupil imperfectly understands. We all know, for instance, that a choice and pregnant passage from a good author, once learnt, will appear constantly in new connections and surrounded by new lights. To learn such an extract is not to "cram,"—provided the digestion of the passage commences from the moment of its being committed to memory. The cramming which is so objectionable, is the forcing down of facts in such a way that digestion of them is impossible. Such digestion, in fact, never commences, nor is ever intended to commence. The facts are piled upon one another, to be vomited whole with the least possible change. A student at Oxford once complained to his tutor, that he could not understand some of his work; and the reply was, "Oh! never mind that! Nobody ever tries to understand it. *Cram* it."

Now let us further consider the condition of a school in which the examinations have wholly engrossed the master's thoughts. The desire to obtain scholars with that passive, receptive capacity which enables them to secure examination honors, leads the teachers to pass over the work which lies nearest to them,—the great object sought for being the winning of prizes.

A boy should enter school in order that he may be supplied, so to speak, with a map or plan of life. As a sea-captain about to go on a voyage inquires for charts of his course, so the lad requires to know where he may expect danger, and what courses are likely to lead to a prosperous voyage. Instead of these charts, he is supplied with an aid to run a short race for a prize of contemptible value, with overloaded canvas, each sail of which is simply an advertisement sheet. The boy is estimated solely by his prospect of getting advertisable honors. And so, in the school, the regular work of education is laid aside, and special preparation takes its place. The few clever or precocious lads who may possibly win, are trained and entered for the race. Those who could not be made to win pay for those who do win. A few great successes advertised bring together numbers, whose fees will have built up a fortune before the hollowness of their training is discovered.

Meanwhile, a competition—a scramble—has arisen for the clever boys. Some public schools—and, I regret to say, some schools supported by city companies—advertise scholarships to be competed for by outsiders. There would not be much objection to these prizes being given as an incentive to work in the school itself, where all the circumstances attending that work could be known; but they are here offered in order to attract to the school a few ready-made good *examinees*.

A private schoolmaster now takes the hint, advertises in the *Times* that he offers two scholarships of £100 a year each, and two more of £50 a year each for little boys preparing for scholarship examinations. It is worth an enterprising master's while to buy up a few clever boys to advertise as successful at the Entrance Examinations of the public schools.

I know from experience that good, sound and wholesome results come from the giving of prizes as the recognition of merit in the school itself. I acknowledge that wealth available for scholarships may be judiciously applied if it tends to establish that educational ladder which has for so many years been a current figure of speech. I should like to see all the schools of the country arranging themselves in continuous order between the highest and lowest. If any one of them has funds to spend in scholarships, they should be expended either on the most needy and deserving of its own scholars, or should be placed at the disposal of lower schools. They will always be spent to advantage when they furnish education and professional training for future schoolmasters. The only purpose for which I have desired scholarships for our own school is to enable those boys who my experience tells me will make good teachers to obtain a more advanced education. The giving of scholarships to enable boys of ability to prolong their training beyond the time they could otherwise give to it, either in the school in which the scholarship is awarded or at one of a higher grade, may be productive of good; but the system of offering the prizes

and scholarships of one school to draw off the cleverest boys from other schools on the same or a higher level, is thoroughly bad,—an evil without a redeeming feature.

Let us now proceed to consider some branches of the unexamined work. The first refers to the efforts requisite to become acquainted with the character and circumstances of pupils. In these days of large schools the task is no light one. A medical man with a large practice has an advantage over one with a small practice, in being able to found his opinion on larger and broader experiences; but, having little time to give each case, a greater concentration of attention is demanded of him. A similar remark applies to the master of a large school. Locke's plan of education by private tutors is bad, because it is only by comparing one boy with another, by watching boys together, that differences of temperament and mental character can be fully estimated. Nevertheless, it is not without exhausting application that a master of a large school gets to know his pupils. Unless he knows them he may easily misinterpret what he sees and hears,—he cannot, for instance, distinguish between perplexity and obstinancy, between weariness and indifference. In some he has to remember that there is weakness of constitution, in some seeds of disease. The dullness of some children and the irritability of others spring from such sources; and again, the precocity of boys is frequently traceable to bodily disease. The master has to know something of the individual circumstances and peculiar characteristics of his pupils, their tempers and dispositions, their talents and natural tendencies. This cannot be dispensed with, for we cannot deal with all alike. In one sense wholesale education is wholesale failure. In a large school, the most exhausting and most difficult task the master has to perform is to recognize and provide for individual peculiarities amongst such numbers.

Some boys are very sensitive. You cannot administer a rebuke to them in a direct way without being severer than you intend. Some have a knack of interpreting literally what was not intended to be so taken. Allow me to refer, in illustration, to an incident which recently occurred at my own school. A boy, apparently in great trouble, enters the head-master's room with the announcement that he has to report himself for being untidy in dress. "What is the matter, then?" asks the master. "I have my playing clothes on." "How is that?" "My mother thought it so wet and muddy that better clothes would be spoilt." "Is it wet and muddy in school?" "No, sir." "Then your mother had better send another suit for school when she provides you with the untidy clothes for use in the wet streets."

A few days later the same boy came at 9.30 to the master's room again, having walked a couple of miles with a large brown paper parcel under his arm. "Please, sir, where am I to change my clothes." What was the master to say? Was it an easy thing to decide? The lad was so serious that the master dared not smile. He simply said, "Well, I will retire while you put yourself straight here." In the evening, of course, the toilette performance was repeated.

A few days afterwards, however, the master observed the boy entering school and looking at him strangely and significantly. The cause was apparent at a glance. "Why, you have a new waterproof coat this morning!" "Yes, sir, my mother thought, after all, it was less trouble to buy me a new macintosh." The boy seemed to lift his head considerably above his ordinary stature when the master replied, "Your mother is the most sensible woman I have heard of to-day."

Look, again, at the work of observation and discrimination required to discover the *kinds* of study and of work which will enlist his sympathies and arouse his faculties. Consider how invaluable is that experience, that judgment, which enables a teacher to say to a pupil, "Though you would fail in one department of study or in one kind of pursuit, there are more gateways of knowledge than one; there are yet occupations in which you are capable of achieving honorable success by the aid of such powers of mind and body as you are well able to develop." Had young Macaulay been under the counsels and guidance of a master with this insight into natural aptitude and the natural bent of genius, he might have been spared days and weeks of torture spent over mathematical studies, which he abhorred, and over which he nearly ruined his health, only in the end to find himself ignominiously "gulfed" at the examination.

Another illustration of the absence of this division of the unexamined work of the schoolmaster is afforded by the case of Thomas Edwards, the Scotch naturalist, the story of whose life has but just been told by Mr. Smiles. In his case a whole career was marred for the want of that timely appreciation of natural genius. Edwards' real

character, instead of having been divined by a master or teacher, was left to be discovered and appreciated by his biographer. We now know him to have been a youth with whom the love of nature was almost a passion; it was, at least, a propensity so strong that not all the discouragements and rebuffs he met with—and they were by no means slight—availed to repress it. It did not, it is true, always manifest itself in a form which recommended it to others. In fact, as a boy, with his collection of newts, horse-leeches, beetles, frogs, sticklebacks, moles, birds, rats, crabs, and hedgehogs, he was considered by his neighbors as an unmitigated nuisance, since his "venomous beasts," as they called the lad's favorites, would, from time to time, stray from the roof of their protector and turn up unexpectedly in the bed-rooms and parlors and kitchens of the adjoining houses. Even his parents could not look with favor on the irrepressible propensity of a son who, ere he had reached his fifth year, on one occasion brought a wasps' nest, wrapped up in a shirt, into the bosom of his family. They spared no pains, but resorted to the severest measures, to cure the boy of such dangerous tendencies: they applied the rod, they tied him to the table, they bound him hand and foot, they even took away his clothes. But all to no purpose; he disentangled himself from his bonds, and attired in the first article that came to hand, he was soon with the snails and worms and centipedes.

So at last they sent him to school, and he took his "beasts" with him. In the course of a few months he was turned out of three schools successively: from the first, for bringing a jackdaw, which "cawed" at prayers; from the second, because his horse-leeches, which were probably inadequately fed, crept out of the bottle, and began to draw the blood of the nearest pupils; and from the third, beacause on a desk a centipede or Maggie Monyfoot was found, which Thomas was falsely accused of introducing into school. For denying the charge he was caned and expelled. "Go home," said the master of the third establishment to the wretched boy, "go home and tell your father to get you on board a man-of-war, as that is the best school for irreclaimables such as you."

Now, it is far from difficult to picture to ourselves a schoolmaster who, discovering the secret of such a propensity, should not only prevent its becoming a nuisance, but should direct it to the attainment of high, useful, and even noble results. Some men, like Faraday, have been brought by accident into contact with men who could perceive and direct the natural bent of their genius; others, like Edwards, have it discovered too late for it to be made much use of; no doubt, in some cases, it is never discovered; that is to say, there are men who have never been induced to develop the power that in early life was innate within them. But it would be easy to prove that in hundreds of cases, the true worth of the men has been discovered, and their energies have been directed into profitable channels by the schoolmaster.

Again, there are the watchfulness and care requisite to keep in view the highest and best ideals,—to maintain what is called a high tone. The difficulty of governing boys and youths is always great enough; but what must be the labor it has cost the master of a school where admirable discipline is maintained with ease, where cordial relations exist between master and scholars, and where the majority of the pupils are characterized by a straightforward, manly bearing, free from forwardness, on the one hand, as from timidity on the other. These qualities are to be found in some schools, but in *no* schools where they are found do they come by accident. Assuredly, in ennobling and purifying what formerly was in many establishments an unhealthy moral atmosphere, the schoolmasters of our day have made no small contribution to the general welfare. This has been and is part of their unexamined work. Where they labor to produce breadth of view and mutual sympathy, their work will bear good fruit in the next generation, producing social harmony among different classes, amongst men of different occupations and devious, if not conflicting interests. It is no easy matter to correct the little errors and faults of a boy at school by the application of principles which may with equal reason be applied to the corresponding errors and faults of the grown man; yet the work of the schoolmaster cannot be said to be well done until this is the case. To shape a boy's conduct in life, to lead him to be industrious and thrifty, to respect property, and to be faithful in the performance of engagements, are certainly of not less importance than to supply him with information.

Further, there is the physical training necessary to give health, vigor, and activity to the youth committed to our care. This is an object not secured without thought and

exertion on the part of the master. There is one kind of physical training which does not come under the head of unexamined work,—I refer to such trials of strength as we see in the Eton and Harrow Cricket Match, the Universities' Boat Race, foot-ball contests, &c. All these exhibitions of strength and skill are exposed to the same danger as that we have pointed out in the examined work of the schoolmaster,—I mean, that they are liable to be pushed too far; instead of being subservient to the purposes of a complete and perfect education, they sometimes tend to usurp its place. The development of the body either aids or impedes the development of the mind. To give power to the muscle and suppleness to the limb, to promote animal health and vigor, to secure purity of bodily habit, is to assist education. But to spend the whole of the energies of youth in the attainment of animal attributes, is to rival the brute and the savage. It is, therefore, another difficult task of the schoolmaster to secure the fit and proper care of bodily health, while at the same time restraining within proper bounds the admiration for physical training. Corporeal health must receive attention, for mental vigor cannot exist long without it. The roots of a tree must be respected for the sake of the tree. If the roots fail, the tree will fall.

As we proceed, the field of inquiry so enlarges that we cannot see where it ends Many are the topics which might be embraced under our title, some of which the schoolmaster mentions only with hesitation and bated breath. For instance, who will examine the work involved in managing the parent;—Herculean task, involving great labor for small results. Mr. Lake, in a humorous paper read at one of the Educational Conferences, classified parents under many heads—careless, busy, fidgety, wavering, anxious, fond, sanguine, earnest, sensible, and so on; but nearly all alike were unreasonable. I have heard a schoolmaster say—and I believe the opinion is shared in by many teachers—that children are often reasonable, but parents never. The only consolation I can offer on this point is, that when the unexamined work of the schoolmaster is well done, we shall give to the next generation a better legacy than we received from the past; and the parents of that generation will assist rather than impede the educator.

I can imagine some of my hearers saying, "Surely you have taken too wide a view of our work. If we could do all this with children, they would indeed be well trained and equipped for the crusade of life; then every duty would be conscientiously fulfilled, every difficulty and danger would be surmounted, and there would be no height of virtue or intelligence which would be inaccessible. But see how little of what we attempt can be accomplished,—look at the hindrances we encounter on every hand. If your description of our work be correct, then it is to be feared it is beyond the power of any one of us adequately to execute it."

Now, in reply to such comments, I have to admit that it is probably beyond our power fully to work out the problem we have to solve; but I believe at the same time, that we shall all succeed in proportion as we take a wide view and a high aim. By keeping the true goal in view, we shall be able to draw nearer to it. There are, fortunately, both men and women in this vocation who do not need to be cautioned against narrowness of view. There are men and women whose work, though it is sometimes impeded by the trammels of prescription and tradition, we cannot contemplate without desiring to emulate it. There are amongst us, laboring to educate the youth of this country and this generation, men and women of sound intellect, enlightened conscience, untiring energy, and noble aim. Let honor be given where honor is due. Such men and such women have warm hearts and generous natures,—they are ever ready to sympathize with and give counsel to others. When our work is heaviest and our days are darkest, we may take counsel together; we may obtain help from one another and from these leaders of our ranks, and so renew our courage; but, even in the day of our deepest discouragement and despondency, let us do all that it is possible for those in our positions to do, and come what may, let us never lower the standard at which we aim, nor permit the ideal we have set before us to be degraded.

Those, however, who are not in the profession may likewise say, "You are estimating the importance of the teacher's work too highly; you are forgetting its natural limits, and ignoring the demands of the ordinary work-a-day life of the world. Schoolmasters, like all other men, are liable to fall into the error of the leather-seller in the fable, and you have fallen into it."

In reply, it matters very little how lightly the profession to which we belong may be esteemed by the outer world compared with

the question, "What estimate of it have the teachers themselves?" To raise this estimate was the object I had in view when, in response to a request from your secretary, I set about writing this paper four days ago. I believe I have succeeded as regards myself, for I have resolved to pay greater attention to some of the duties to which I have referred, their importance having grown upon me during the performance of my task. If you share with me this feeling, my labor will not be thrown away.

DISCUSSION.

The Chairman (H. W. Eve, Esq., M. A.) mentioned four points which suggested themselves for discussion—(1) The duty of the schoolmaster in regard to ascertaining the bent of character and the conditions of life of individual boys; (2) What the schoolmaster could do in the way of laying out the pupil's life for him; (3) The necessity of attention to details and constant watchfulness, in maintaining a high tone in the school; and (4) Physical training. The problem was difficult in the case of boarding schools, where the action of the master was not fettered by influences from without; and was, of course more difficult still in the case of day schools.

Dr. Oppler said that examinations served rather to show the work of the pupil than that of the schoolmaster, to whom the results of examinations often did not do justice. An examination of his *method* would be a fairer test of the master's work. In very large schools it was impossible for the head master to obtain such an intimate acquaintance with his pupils as to enable him to influence to any appreciable extent their moral training. A large school should have a sufficiently large teaching staff to enable each assistant master to have full control of his class; and the head master should be, as far as possible, free from details and from personal instruction, and able to give his mind to the working of the instruction as a whole. But moral training was the main topic, and here lay the real unexamined work of the schoolmaster. As to the exceptional instance that had been given by the lecturer, of the danger of the suppression of genius for want of discernment on the part of the teacher, he could not see that the schoolmaster was to blame. Circumstances would in the great majority of cases, as in the one in question, bring genius to light.

Mr. Marsh would have liked to hear some definition of the word "cramming," which had been referred to in the lecture. It was, he thought, important to come to some understanding on this point, in considering the question of the supposed pernicious effects of examinations. If it meant the forcing a child to learn that for which he had little or no natural liking, he was afraid that the great majority of teachers could not escape the charge of "cramming."

Mr. Mast defined "cramming" to be the attempt to force down what was mentally *indigestible* in the way in which it was put before the pupil. Much, no doubt, must be learnt by heart; but everything could and should be explained beforehand. The example of the Government in their system of paying the elementary teachers by the results of examinations was at the bottom of the present extension of the system in every direction, and true education was neglected in the endeavor to produce something for show. In regard to eccentric geniuses, he agreed with a former speaker that the schoolmaster was not bound to give special attention to them. The pupil who had a special talent was only too ready to indulge it on every possible occasion; and, both in regard to the pupil himself and to his schoolfellows, it would be found necessary, not indeed to quench it, but to keep the propensity within bounds. The schoolmaster must not expect to see at every step the results of his efforts; but must persevere, convinced that they would bear fruit in after-life.

Miss Bajley remarked on the influence of the head-teacher's personal character in developing an *esprit de corps* in the school, both among the pupils and the assistant teachers. Where such a spirit prevailed in a school, it availed much to help the teacher beyond the limits of the school room, and parents would often find in their children the eager champions of the teacher's views and acts. Young people were quick to appreciate thoroughness and earnestness, and the parents would drawn their own conclusions. How important was the influence of high aims and force of character in winning the sympathy of subordinates was shown in the case of the late Miss Doreck, whose spirit still survived in the school she had established. She (Miss Bailey) did not think it well that the principal should give up teaching; the example of her superior method and experience could not fail to stimulate her assistants to exertion and emulation.

Mr. Mitcherson drew attention to the fact, that it was not in the naturally quick boy, who came to the front at examinations, that the teacher's work could be fairly appreciated. Credit was rather due to him for the patience and labor spent on the dull and backward boy, who, after all, could barely be brought up to the passing point.

Mr. Ellis could not speak from experience, not being a professional teacher, though it had been his early desire to become a schoolmaster. He thought that the principle, that a child must understand fully everything he was set to learn, could not be maintained. There were many things of which it must be said by the teacher, "You must learn this now, which you will understand better afterwards." Grammatical paradigms must be "crammed," so must the "multiplication table," if we narrow the definition of the word "cram" to that which is learned by rote without present understanding of its *rationale* and bearing. But the unexamined work of the schoolmaster lay outside of all this. No examination could show to what an extent the master had toiled in the case of pupils wanting in natural endowments and opportunities. It was not to be expected that the head master of a large school could be like the shepherd, knowing the face of all his sheep. His influence would be felt chiefly in the selection of his assistants and keeping *them* up to the mark. His participation to any great extent in the actual work of teaching must interfere with this. If he did teach, it should, he (Mr. Ellis) thought, be such subjects as his assistants could not or did not teach, and which gave token of his principalship in the eyes of his pupils. He instanced the almost superstitious veneration with which some great scholars, heads of public schools, were regarded by the boys.

Mr. Hooper said that he once thought it possible to teach anything so that it might be digested; but he had been obliged to modify his opinion. There

were some things which could not be made plain to the immature intelligence, and much must be taken on trust. But he had great faith in the latent force of knowledge; it could not be assumed that anything was absolutely forgotten. In education, as in business, it was, "Like master, like man;" and energies and earnestness in the head called forth the same qualities in his assistants. It was natural for a master to take pains with a pupil whose willingness to learn and natural ability showed at once the fruits of instruction and did credit to his teacher in the eyes of others; but too frequently he found his clever boy taken away from him to grace the honor list of some more famous establishment which had scholarships to offer. He thought that the extra strain which such bright pupils were subjected to by the stimulus of valuable rewards was often disastrous in its results on their bodily and mental health.

Mr. Newcombe thought that the discussion had gone away somewhat from the main subject of the lecture. The "crammers" for special examinations were not schoolmasters in the proper sense of the word. He was of opinion that examination work could be carried on with a due regard to the unexamined work. He did not understand the views of certain theorists and amateurs in education in regard to examinations. The plea formerly put forward for the necessity of examination was the low level of instruction in middle-class schools. Now the examinations themselves seemed to be looked upon as an evil, as impeding the real work of education, by fostering "cramming," etc. He had early adopted public examinations, and had regularly sent in a large proportion of his pupils to the College of Preceptors and the University Locals; and he was persuaded that the advantages to be derived from such examinations were most important, while the drawbacks were insignificant. He confessed that he was glad to get hold of a clever boy, and to keep him if he could. The clever boy was a stimulus to his fellows, and helped not a little to raise the tone of the school. He heartily sympathized with the last speaker, and confessed to a feeling of soreness at seeing gifted and well-trained pupils attracted away from his school by the hope of rewards advertised by large and richly-endowed foundations. That the head-master even in large schools could exert a vast amount of personal influence, both through his assistants and also by direct contact with the boys, was shown in the case of Arnold. It was in the unexamined work—the thought and anxiety, and patience that were demanded to train up dull and immoral and ill-conditioned boys—that the faithfulness and honesty of the master were put to the test. And it could not be denied that the private schoolmaster had by far the greater share of this unexamined work, for which he got but little credit.

Mr. Thornton said that there seemed to him too little of doubtful matter, in the paper they had listened to, to leave room for much discussion. The question of the advantages and disadvantages of examinations was not the main issue. The paper was, for the most part, an earnest exhortation to schoolmasters to do their duty. What the lecturer in substance said was, "Be as *good* men as you can, and as far as possible *strong* men:" for there is no calling more wearing than that of the schoolmaster, especially in regard to the treatment of dull minds and perverse dispositions.

The Chairman, in proposing a vote of thanks to the lecturer for the paper they had all listened to with so much attention, took occasion to remark that there was not, in fact, in large public as compared with private schools, that difference, in regard to personal contact of master with pupils, which had been assumed by some of the speakers. Eton had been described as a collection of private schools, the boy's tutor being the directing influence; and in a well-organized large school each assistant master was very much in the position of the head of a smaller establishment.

After a few remarks from Dr. Wormell in reply to the points raised in the discussion, a vote of thanks to the lecturer brought the proceedings to a close.

Educational Times.

FREE TEXT-BOOKS.*

OUR schools cannot be properly denominated free schools so long as part of the cost of instruction falls directly upon those who enter them, and acts as a bar to prevent any from entering. Should I apply this statement to the payment of teachers' salaries, or to the purchase of apparatus in general, my proposition would be admitted. Will it be admitted, when applied to that species of apparatus called *text-books?* For text-books are as truly apparatus of teaching as are globes and maps. Does the fact that each pupil must have exclusive use of his text-books, but not of the globe or map, make it necessary that he should buy the former? On the same ground, he ought to buy the crayon, ink, or examination-paper that he uses, or keep his own desk in repair. The same authority that requires a city to open tuitionless schools now empowers it to make that school *wholly* FREE,—and upon an equal basis of justice.

Many arguments in favor of the adoption of this plan can be presented. I will name but three of them, besides the general one of making our schools wholly free: first, æsthetic—the teacher would have stronger authority and influence in teaching and enforcing the proper care of books; second, consistent—because we should thereby secure, what we aim to secure, the attendance of many now practically debarred, since they are unable to buy the necessary books and are unwilling to ask for aid; and third, economic—by the saving of a large waste entailed by the disuse of half-used text-books. For these and other reasons, cities that have had experience—Fall River for two years, Lewiston for three or four, Bath for five or six years—emphatically commend the plan to others.

The economic method being that which

*From the Report of the School Committee of Salem, Massachusetts.

will influence the mind most, let us see what economy appears from a comparison between individual and municipal expenditure. If the pupils supply themselves without aid from the city, it is evident that for every enrolled pupil a set of school-books must be purchased. Should the city supply a set of books to each desk that is occupied, the average number of pupils daily belonging to the schools would be the number of sets to be purchased. According to the experience of the cities named above, in which the average cost per pupil is $1.00 to $1.10 a year, the total annual expenditure for text-books in Salem, with the present number of pupils, would be from $3,000 to $3,600. Now, what is the cost to individual purchasers? A fair estimate of the cost of all books and stationery needed by a pupil, as at present, in passing through the primary and grammar-school grades, nine years, is $18.00, or $2.00 a year. A similar estimate for a pupil passing through the High School would probably amount to $40.00, or $10.00 a year. There were enrolled in the High School 251; in the grammar and primary schools, 3,794. The total expenditure for the year could not be far from $10,067.00, besides the supply to the Naumkeag and evening schools, now purchased by the city. Is it economy to pay $10,000 for that which $3,600 would supply? Is the waste any the less because the larger sum is paid by those who happen this year to patronize the schools, and whom the city and the State urge by all influences under their control to patronize the schools, while the smaller sum would be an addition to our municipal outlay, a burden upon the taxpayers, and so an expenditure of those to whom the support of our school system, on account of its past, present, and future service, really belongs?

If it belong to the individual to buy his text-books, because he as an individual is benefited by the use of them, why does it not belong to him to pay as an individual for the other school expenses incurred for him? If it belong to the tax-payer, because of his own past opportunities and his present and prospective advantage, to support the schools, why is not this a legitimate item of their whole cost? By the present plan, $10,000 are taken yearly from resources within the city, to pay for text-books; by the other $3,600 at most would be taken yearly from resources within the city. The direct levy would save some $6,400 a year, and would add less than 14 cents to each tax on one thousand dollars. But the actual additional cost is even less than this, since the city is now required by law to supply text-books to those who certify their inability to pay for them. The annual cost to the city for these supplies is not far from $1,600, nothing of which is recovered by the assessors. Thus, for nearly half of what the whole supply would cost, for all children in the schools, we provide books and stationery now for only one-fifth or one-sixth of the children.

The reason for the great disparity between the actual cost of the books used and the estimated cost by the "free text-book" plan is this: In the former case, books are not used so long as they might be used; in the latter case, they are used as long as serviceable. It is the testimony of those who have had experience that books last on the average four years each, when supplied by the city. Deduct, from the $10,000 mentioned above, $1,000 for stationery which "perishes with the using," and the balance, $9,000, will be the cost of a supply of books which is said to last four years. Hence the average annual cost for books would be $2,250; and for books and stationery $3,250, which by another mode of reckoning is about the same as the cost already estimated.

I quote the following figures from school reports: Lewiston, 1874—pupils daily belonging, 1,964; cost of books, etc., $2,159.53; Bath, 1873,—pupils registered, 1,716; average annual cost of books, etc., for five years, $1,773.83.

The purchase and delivery of books would be more satisfactory than at present. The city as a buyer would obtain the terms given to a jobber, 40 per cent. discount. The business could still be transacted on commission by the Committee's agents, who would have specific orders and could deliver at once.

I am constrained to indicate another advantage which a study of the educational question opens to our consideration; the text-book would not hinder, but rather help, the best methods of teaching. Now, the pupil buys, not such a book as is adapted to his stage of development, as that would necessitate too many books, but such a one as will be adequate to the needs of his last stage of progress. In a study extending through five, or even three years, is it not evident that a book which is suited to one part of the course may be too elementary or too abstruse for another part? It would, moreover, cost less to supply the appropriate books for certain stages of progress, than to

supply the most advanced books for every school grade. To illustrate the educational advantage, consider the study of history. One result of that study should be the acquirement of an intelligent critical knowledge of history; another, the formation of a taste for historical reading. Now, both of these results may be attained, and in some school systems are attained, by the use of different authors successively. In one school grade, an interesting author might be read and discussed and a few leading points marked for memorizing and for subsequent tests; in another grade, an author giving fuller details, a systematic outline, might be studied, recourse be had to outside sources of information, and the use of reference books learned—a very profitable course.

THE CHILDREN.

MRS. FANNY SPANGENBERG.

THE traits that mark the human species of a larger growth are strongly developed in children; indeed, in some cases become weaker in after life, especially those of inquiry and industry. The bright, wakeful spirit that prompts the infant to leave its couch before the early dawn, and rouse the other inmates of the house at that unreasonably early hour, degenerates as the years pass by, into the sleepy, lie-a-bed feeling of some grown folks.

Industrial pursuits are largely followed in childhood. Never idle, a child just beginning to inquire into the mysteries of the world around it will do more work in one day than an older person in six. The depth of drawers must be explored, contents of work-baskets be inspected, buttons be swallowed to test their nutritious qualities, the ins and outs of table-legs and chair-rounds must be calculated, every available yard of carpet or floor be measured by hands and knees, wash-tubs be sounded, contents of oil-cans and blue-boxes be tasted, and the experiment tried how much noise the table-cloth will make if pulled suddenly down with all its contents.

With some exceptional cases "Familiarity breeds contempt," and finding out the vanity of all sublunary things, or sighing for new worlds to explore, the precocious infant ends in "crying for the moon." Then again, in the vain attempt to try how much angelic nature may adhere to his physical frame, makes the trial of flying from the head of the stairs, the unfailing musical accompaniment being, no doubt, an effort to recall angelic airs.

How much labor, too, is expended in the manufacture of dirt pies; what a love of digging and delving, testing the qualities of dirt and sand! If this taste be encouraged may we not expect a race of farmers, gardeners, florists, or masons? Or by proper instruction the young idea may be taught to mould the "human form divine."

Never still (of course, exceptions prove the rule) except when sleeping; never quiet, except when eating; never doing what ought to be done; always doing what ought not to be done; quiet, noisy; busy, lazy; good-natured, cross; quick, slow; lovable, tantalizing; quick-witted, dull; generous, stingy; the most contradictory things in the world are children.

The education of children does not, as a great many persons imagine, begin with the first day of school life. At the age of a week or ten days, the perceptive faculties begin to awaken. If the child be carried when awake, held when asleep, shown the lamp in the evening, it soon becomes a despotic household tyrant. The more time and attention given to its demands, increases instead of diminishing its wants, in this respect resembling the selfishness of grown-up children. As it grows older and appreciates brightness and beauty, no matter what it cries for, it must have it. Its æsthetic nature is sometimes stimulated by the sight of the china on the parlor-shelf; this, yielded to its imperative cries, helps to develop the bump of destructiveness. Nay, if it wants the looking-glass and hammer, behold, they are given; and the choicest treasures of the home are none too good for its baby-fingers. Is this an exceptional case? Allow me to ask, have you never known any *almost*, if not quite as bad.

As the child grows older, if the mother becomes a slave to its whims, we will soon behold a flourishing specimen of spoiled child. Each parent, of course, has his or her own theory on the best methods of training children; but the latest theories have gradually resulted in turning out that largely known and rapidly increasing class recognized everywhere as "Young America."

As soon as the child can run alone, especially if a boy, he is often turned out into the street, like the bees from an overcrowded hive, and allowed to roam, unquestioned and unreproved. He soon learns all the accomplishments of the present time, smoking,

chewing, swearing, pugilistic exercises, etc.; and before the alphabet of books is commenced is almost prepared to take a first-class diploma in the street collegiate course. There is sober truth in what we are saying. It may not be so noticeable in some sections nor among some classes, although enough cases can be found among the wealthy, intelligent and moral families of the land; but investigate the morality, habits of living, home education and discipline among the swarming inhabitants in the outskirts of large cities, in the crowded tenement houses, among the population of the mining districts, and the indications are that the children of this age, if not restrained, will astonish the world by a certain species of smartness and cleverness, and also by their superiority to such old fogies among their parents and teachers as still believe in the old-time doctrines of morality which distinguished our forefathers.

This coming generation of men will train up *their* children entirely by "moral suasion," and ignore the old-fashioned wisdom of Solomon and his obsolete remedy for the cure of childish depravity. Sometimes under the influence of passion, or when the conduct of their children becomes unbearable, more especially, when their wills conflict with the wills of parents who are foolishly indulgent, the rod will be used; at another time, the same things may pass unreproved and even unnoticed. Such persons will delegate authority to a teacher, saying, "Make them obey you." And they are first to make an outcry against punishment or restraint put upon the inclinations of their children.

This is not Solomon's method of training. His ideas that "Foolishness is bound in the heart of a child," and that "The rod and reproof give wisdom, but a child left to himself bringeth his mother to shame," if true, may show the necessity for wise parental discipline. Did he learn these truths by sad experience? Who give us most trouble in our schools? Those who are most indulged at home and never punished. If the home training be good, little discipline is necessary, and its influence will extend into the school-life. Some children, with dispositions naturally gentle and sensitive, require no corporal punishment. Cross words to such are worse than blows, and wound the soul deeper than the strokes of a reed could hurt the physical frame.

Young America at length enters the classic precincts of the school-room. And we, as teachers, are required to take these independent, oft-times defiant spirits in hand, assimilate their characters and dispositions with those of the gentle, well-taught, and obedient children (alas, that we have so few!), who come from well-regulated homes, in which morals as well as manners are taught, where religious principles are the rules for conduct, and where parental authority is paramount. And here during a stated period of the day we must wage a warfare against the outside influences that surround them, the worst of which is immoral companionship. Here we are to awaken that thirst for knowledge, that love of morality, that longing for the beautiful and the true, which will ennoble their future labor, place them on a higher plane of living, strip the allurements of vice of their false glitter, and bring them nearer to what ought to be our ideal—Man, as he was in the beginning, made in the image of God.

With the spiritual forces of sin and darkness operating against us, with opposition often from parents and public sentiment, how great is the task before us, how many the moral forces needed for the work, how grave the responsibility! May we strive to attain the meekness of Moses, the wisdom of Solomon, the strength of Samson, and the patience of Job. May we cultivate the Christian graces of Faith and Hope, and of Charity, that "covereth a multitude of sins;" and in the end we will receive our reward, even if it is nothing more than to have the profession of teaching more fully appreciated in the future, when our successors may enter the harvest field and reap the fruit of our labors.

HOW TO IMPROVE OUR PUBLIC SCHOOLS.

A SERIES of eighteen papers appeared in the Philadelphia *Evening Bulletin*, during the past summer, under the head of "How to Improve our Public Schools." They were written by Professor Jacob Ennis, of Philadelphia, a teacher and scientist. He had in immediate view, in writing his articles, the public schools of the city in which they were published, but much that he says applies elsewhere equally well. Below will be found the first two of these papers; others may be published hereafter.

FIRST PAPER.

There are well-founded complaints against our public schools. The Board of Education are aware of deficiencies and imperfections. But the difficulty

is to see precisely what remedies are to be applied. Having been many years in the work of education, I propose to show, in the fewest possible words, what are the defects of our system, and how they are to be removed.

There is a sameness and a dullness in school exercises which make them repulsive to children, and drive them out of school. According to the last published report, more than half the children abandon the schools at the early age of eight or nine years. There were then 98,808 in all grades of public schools; and of these more than one-half, 48,990, were little children in the primary schools. The majority of these very young pupils stop their education there, and do not enter the higher grades of schools. The secondary schools that year had only 24,308; the grammar schools only 13,969; the consolidated, 7,031, and the High Schools, 1,256. This turning the great majority of our children out of school at that tender age is an alarming fact; and a remedy can be and should be applied.

The sameness and the dullness of the school exercises are further seen in the many years the pupils are confined to the same studies. Arithmetic is begun quite early; geography at about the age of eight or nine years, and grammar soon after. These are frequent exercises, and they are kept on till the age of fifteen or sixteen. No wonder that these studies grow stale, flat and unprofitable, during so many long and weary years. The complaint is that they are not mastered even on leaving the grammar schools, and the very best scholars who are allowed to enter the High Schools have to study grammar and geography two years longer! The reason why the pupils are not proficient in these studies much sooner is not for want of time, but for want of interest. Sameness and dullness are the terrible nightmares which are driving real progress out of our schools; driving out half the children before entering the secondary schools; and stupefying the intellects of the other half who remain. The grammar of our language is the most simple of all grammars; and, with a proper degree of interest, two years at the very longest are enough to finish both geography and grammar.

Another well-founded complaint against our public school system is that it is not sufficiently practical; it has too little relation to active life. What relation it has is mostly to make clerks for stores; whereas, to make rising manufacturers for this, our manufacturing city, is entirely ignored. His Excellency, Governor Hartranft, puts this complaint in these terms: "The system should be made more practical. In the large towns we are educating hundreds of young men for clerkships, for whom there will be no employment, and preparing others for professions already overcrowded; while what Pennsylvania needs above all is educated mechanics. The minds of our children should be directed in the schools toward intelligent labor. The great mass of mankind must always labor. We cannot all 'live by our wits.' Too many try it, and we suffer as much by their failure, perhaps, as from any one cause. And the fault lies mainly in a misdirection of education. Let us make it more practical." How shall we do this? We may accomplish this great object by the study of the natural sciences, thereby imparting a knowledge of all material substances and of all physical forces —the very knowledge necessary, above all others, for manufacturing industry.

Another complaint is that the present school practice has too much about mere words, and too little about things. Long columns of words, with abstract definitions, have to be memorized, and the composition and derivation of each word have to be recited. Whereas, the easy and natural method of learning the meaning of words is to see and hear them in use; this is the way young children learn hundreds—thousands—of words. A dictionary should be merely for reference. To compel a child to commit to memory long lists of words, with their definitions, derivations and compositions, is one of the ways of robbing him of his time, and disgusting him with his school. How absurd to confine a boy to the composition of thousands of words, when he is never taught the composition of the air he breathes, the water he drinks, the common salt he eats, to say nothing of his food, his clothing, and the innumerable objects he daily handles! Things, thousands of useful and deeply interesting things, have been revealed by science; and these are overlooked, entirely ignored, for the study of mere words!

It is much easier to pull down than to build up. But to me it is most irksome to be a fault-finder. In my next I shall show that the many thousands of interesting facts revealed by modern science should be immediately introduced in all our schools and studied every day. They fill the minds of the pupils with wonder. They drive away dullness. They enlarge the views, they arouse the feelings, and they store the memory with the very best of knowledge for practical life. The sciences applied to the industrial arts have already changed the face of the world, and they will do it again.

SECOND PAPER.

In a pecuniary sense, in a business point of view, the most precious property of any town is its children. In the race of brisk competition, that community which neglects the minds of its children will fall in the rear. The cultivation of their intellects, the enlightening of their spirits, will infallibly insure prosperity.

Three remedies have been proposed to break up the present dullness of our schools, and awaken the slumbering intellects of the children. These are:

1. To introduce the system of object lessons
2. To adopt a thorough system of drawing.
3. To introduce all the Natural Sciences, with all their brilliant experiments, and all their objects of wonder and of wisdom.

We attend now to the first of these. The system of object lessons must undoubtedly prevail, but their utility and the rapidity of their adoption will depend entirely on what the objects are and how they are taught. Last year, at the Centennial Exhibition, the following was regarded by the friends of the system as one of the best specimens of object lessons: First was a glass goblet with wheaten grains; then the wheat grown into straw, the straw made into braid, the braid into hats and bonnets. There was also straw paper. Next came the wheat ground into flour and bran; then the flour made into bread and cakes, and the bran into fodder for cattle. Certainly it would interest the child for a moment to see all these transformations of wheat. But the grand defect of the lesson is that it informs the child only of what every child must necessarily learn as it grows up in its ordinary intercourse with the world; whereas the school is the place to learn what cannot be learned every day out of the school doors. I will now show how, by introducing the natural sciences, the wheat

may be made into at least two very different object lessons, both far superior to the above.

OBJECT LESSON ABOUT WHEAT—BOTANICAL.

Children, you see these grains of wheat in the glass and these stalks of wheaten straw in my hand, with their full head of grains at their top. Wheat is one of the grasses, and so are all the grains that we eat, except buckwheat. Rye, barley, oats and rice are grasses. Rice and oats differ from the three other grains just named, in not having a close head at the top, but a loose, bushy spray, which botanists call a panicle. Indian corn is also a grass, and so is broom corn, which is also called sorghum, and one of its kinds is used for making molasses and sugar. Sugar cane is also a grass.

You inquire, What is a grass? And how do the grasses differ from the other kind of plants? I will tell you in a way that you will never forget. This stalk of wheat you see is a hollow tube, and at every eight or ten inches it has hard knots called nodes, which are tight partitions across the tube. On every node there grows a leaf, and these leaves you see have no leaf stalk or petiole, but they are sessile; that is, they sit down on the node and their two sides clasp clear around the stalk and fold over one another. Now you know how the grasses differ from the other things that grow from the ground. They have hollow stems, partitioning nodes, and these peculiar clasping leaves. Their blossoms also are peculiar, but these you cannot see now. A few grasses are not quite hollow, but have a soft, spongy pith, as Indian corn, broom corn and sugar cane.

Reeds are also grasses, and so are canes, such as are used for fishing poles and walking-canes. In our Southern States the canes grow very tall, sometimes twenty feet high. In tropical countries, where they are often called bamboo, they grow sixty feet high. How wonderful to see such tall grasses! In that part of our republic reaching from the Atlantic to the Mississippi, and extending southward to include Virginia, there grow 210 different species of grasses! What large numbers the Deity has contrived for the support of man and the lower animals!

In our lessons on mineralogy I have already shown you what silica is, called also quartz and white flint. You saw it so hard as to cut or scratch glass. All grasses have much silica in their slender stalks, to stiffen them and enable them to stand. When you rub two stalks of wheat across each other in the dark you can make the hard silica on their surfaces strike sparks of fire. The silica is dissolved in the ground and the grasses draw it up for use.

The sedges are plants which, on account of their similar appearance, people generally mistake for grasses. But they are not hollow, they have no nodes, and the sides of their *sessile* leaves do not lap over each other around the stem, but they are joined together to form a tube. Although those people who are not botanists mistake sedges for grasses, the cattle do not. They never eat sedges.

It is wonderful to think how much we depend on the grasses, not only for our wheaten bread, Indian cakes, and rice pudding, but also for milk and butter, beef and mutton, woolen clothes and leather. The cattle live on grasses and afford these things. When we ride in a carriage or street car, it is the grasses that make the horses go. In many warm countries the people live mostly on rice, which, as I said, is a grass. The Bible says—"All flesh is grass." This is on account of our short-lived natures. But now we know other reasons; our bodies come mostly from the grass.

I have said nothing of what science has revealed about the germination of a grain of wheat, and its growth into a stalk and a head full of grains. Space here does not permit me to give other botanical facts; and the second, or chemical object lesson about wheat, I must leave for another paper. But the reader will see that the *scientific* teaching about common things should form the staples for object-lessons. Common every-day talk, which every child must necessarily hear, should never be allowed. But science shows how every common object is filled with wonder. The teacher should study the sciences *industriously*, and bring out *new views in advance of the community*, views both useful and delightful.

THE DEVELOPING SCHOOLS AND SCHOOL-SHOPS.

DR. J. T. PAYNE.

ONE of the new ideas in connection with education is the formation of developing schools and school-shops. The paternity of this plan rests with Mr. Stephen P. Ruggles, of the city of Boston, Massachusetts, who, in 1869, made known to some of his friends the plan he had originated. The outline of this plan can be stated clearly enough for comprehension in a few paragraphs.

Mr. Ruggles, as most persons know who are fairly informed touching educational matters, has devoted many years of his life to inventing and perfecting appliances for blind persons to use in obtaining an education. Perhaps it was during his connection with the Perkins Institution for the Blind, located at South Boston, that he made observations as to the probable working of the human mind in making itself acquainted with external objects, that years later led Mr. Ruggles to make the discovery which we mention, the magnitude and valuewhere of cannot now be clearly understood.

Others will doubtless claim to have originated this system; but by a simple comparison with what is already known and in use, it will be readily seen that this plan differs from object-teaching for small children, as well as from technological education, which has been said to be that accomplishment or training of philosophers and men of science who do not wish to learn a trade, but rather to devote themselves to science for its development, as well as their own self-improvement on the one hand, and the advancement and good of society on the other.

The ground-work of the new plan may be

said to be comprehended in taking boys of fourteen years of age and upward, who have finished their preliminary education in the grammar schools, and who are themselves looking to trades as a means of earning a livelihoood, and placing them in what has been named a developing-school. This school-building is supplied with the principal tools, implements and machinery used in all trades. In this school the boys will see the various tools used in fashioning all sorts of manufactured articles. Now it often happens that boys are sent to trades that they have not the least liking for, and are forced to learn how to make things, in whole or in part, in which occupation they can never become proficient, because they are not adapted to the work in hand. A boy is sent to learn the trade of a blacksmith simply because his parents happen to hear of a vacancy in a blacksmith's shop, and get a place for him just as he has left his school. The boy does not like a heavy trade, and he will not accomplish as much in it as another; but his parents tell him that he will not like any trade, but that he must learn to work and earn his own bread. Now this same boy would perhaps have been just adapted by his nimble fingers and fine tastes to become a watchmaker.

In the developing-school the boy sees all sorts of tools, and listens to a description by his teacher of their structure and uses. He is free to handle and use such of them as he fancies, and it will soon be observed in which direction the bent of the boy's genius points. One boy will be attracted wonderfully by a steam-engine, and have an ambition kindled in his breast to make one and be its master. Two boys may, apparently, have the same tastes. Yet in the developing-school one will be drawn to the lithographer's stone, and the other will want, perhaps, to design figures and print calico.

The office of the developing-school is not to complete a boy's education, but to discover what his taste and likings are, and to allow the teacher time to determine, in connection with the boy, what trade should be selected and mastered. When a sufficient period of time has elapsed to determine this point, which will greatly depend on the mental activity of the boy, he is to be removed to the school-shop, where he will find all the tools and machinery relating to his trade, and none other. Here he will begin to learn a trade that he loves to work at, and one that he can take pride, some day, in being master of. He will not have to devote a year of the best part of his life in running about as an errand-boy, and in doing a janitor's or a porter's duty; but he will begin to learn his trade at once, under the instruction of a master who will have no selfish interest in retarding him in his progress, by keeping him employed on some unimportant part of the work a year or two, to thereby save the cost of a journeyman. The learner will go forward as fast as he is able to learn, and it is believed that under this part of a system, a boy can learn a good trade in two years, thereby saving several years that, by the old way, were lost and possibly worse than lost by the apprentice.

After a boy has learned the whole of his trade there would be no objection to his selecting some particular branch thereof, and devoting himself entirely to it. Thus a boy who learned the printer's trade might find it to his advantage, by reason of his speed and activity, to become a newspaper compositor, or, having an artistic taste, he might wish to devote himself to the nicer kinds of printing done in colors; or, having a liking for machinery, he might be pleased with the position of pressman.

In short, boys are to be taught good trades in the least possible period of time in harmony with thoroughness of work. The buildings in this plan belong to the city or State, and the teachers are to be paid out of the school fund. The doors of the school-shop will always be open, and boys will not have to wait and seek for an opportunity to learn a trade. Under this plan the boy will be out of the way of bad associates, and will at all times be on the footing of a student, and not that of a menial, which position crushes the manhood out of one, and often prevents him from rising to the level of his merits. It is the very essence of this plan that is puts the right boys in the right places, where they can make the most of themselves and their opportunities. One can plainly see what the advantages of the school-shop are, and will be, to the world. It will give all young men who so elect, a position in life where they can become producers, and not only support themselves continuously, but also those dependent upon them. By giving young men a trade, which they will have learned by the time they are eighteen or nineteen years of age, they will get a good start in life several years earlier than in any other way, and thereby society will be benefited, and young men will not be so

likely to drift into crime as those having no regular occupation.

Men whose capacities and inclinations fit them to be mathematical-instrument makers would not be found, under Mr. Ruggles' plan, leading the life of a drudge in some calling which they are not fitted for. The best interests of society would undoubtedly be conserved by developing and putting to their right uses the capacities of mankind.

It has been recently stated by one who has looked into the matter, that employers in our large cities are not now taking boys to teach them full trades, and that by a continuance of this custom it will be but a few years before the supply of skilled mechanics will be completely exhausted.

Rev. E. E. Hale, Wendell Phillips, Elizur Wright, and other men who are prominent in all good causes, have spoken the strongest and best words in favor of adopting this method as a part of our common-school system; and before this article is printed, the city of Boston will no doubt appropriate $15,000 for the purpose of establishing the first school of this kind.

This subject needs to be repeated again and again, and commented on in all the educational journals in the land as a matter of vast importance to mankind. It is to be hoped that this subject will seriously engage the attention of educatiors and legislators in every State in our Union.—*N. E. Journal of Education.*

DIPS INTO GOOD BOOKS.

I THINK, among the greatest errors that language has imposed upon us, there is none more remarkable than the sort of antagonism which is established in common language as between Nature and Art. We speak of Art as being, in a certain manner, the rival of Nature, and opposed to it; we contrast them—we speak of the superiority of Nature and depreciate Art as compared with it. On the other hand, what is Art but the effort that is made by human skill to seize upon the transitory features of Nature, to give them the stamp of perpetuity? If we study Nature, we see that in her general laws she is unchangeable; the year goes on its course, and day after day pass magnificently through the same revolutions. But there is not one single moment in which Nature, or anything that belongs to her, is stationary. The earth, the planets, and the sun and moon are not for any instant in exactly the same relation mutually as they were in another instant. The face of Nature is constantly changing; and what is it that preserves that for us but Art, which is not the rival, but the child, as well as the handmaid, of Nature? You find, when you watch the setting sun, how beautiful and how bright for an instant! Then how it fades away! The sky and sea are covered with darkness, and the departed light is reflected, as it had been just now upon the water, still upon your mind. In one evanescent moment, a Claude or a Stanfield dips his pencil in the glowing sky, and transfers its hue to his canvas, and ages after by the lamp of night or in the brightness of the morning, we can contemplate that evening scene of Nature, and again renew in ourselves all the emotions which the reality could impart. And so it is with every other object. Each of us is but for the present moment, the same as he is in this instant of his personal existence through which he is now passing. He is the child, the boy, the man, the aged one bending feebly over the last few steps of his career. You wish to possess him as he is now, in his youthful vigor, or in the maturity of his wisdom, and a Rembrandt, a Titian or a Herbert, seizes that moment of grace, or of beauty, or of sage experience; and he stamps indelibly that loved image on his canvas; and for generations it is gazed on with admiration and with love. We must not pretend a fight against Nature, and say that will make Art different from what she is. Art is, therefore, the highest image that can be made of Nature.—*Wiseman.*

NOT long ago, I was slowly descending this very bit of carriage road, the first turn after you leave Albano, not a little impeded by the worthy successors of the ancient prototypes of Viento. It had been mild weather when I left Rome, and all across the Campagna the clouds were sweeping in sulphurous blue, with a clap of thunder or two, and breaking gleams of sun along the Claudian aqueduct, lighting up the infinity of its arches like the bridge of chaos. But as I climbed the long slope of the Alban mount the storm swept finally to the north, and the noble outlines of the domes of Albano and graceful darkness of its ilex grove rose against pure streaks of amber and blue, the upper sky gradually flushing through the last fragments of rain-cloud in deep palpitating azure, half ether and half dew. The noonday sun came slanting down the rocky slopes of La Riccia, and the masses of entangled and tall foliage, whose autumnal tints were mixed with the wet verdure of a thousand evergreens, were penetrated with it as with rain. I cannot call it color, it was conflagration. Purple, and crimson, and scarlet, like the curtains of God's tabernacle, the rejoicing trees sank into the valley in showers of light, every separate leaf quivering with buoyant and burning life; each, as it turned to reflect or to transmit the sunbeam first a torch and then an emerald. Far up into the recesses of the valley, the green vistas arched like the hollows of mighty waves of some crystalline sea, and silver flakes of orange spray tossed into the air around them breaking over the gray walls of rock into a thousand separate stars, fading and kindling alternately as the weak wind lifted and let them fall. Every glade of grass burned like the golden floor of heaven, opening in sudden gleams as the foliage turned and closed above it, as sheet lightning opens in a cloud at sunset; the motionless masses of dark rock—dark though flushed with scarlet lichen—casting their quiet shadows across its restless radiance, the fountain underneath them filling its marble hollow with blue mist and fitful sound; and over all—the multitudinous bars of amber and rose, the sacred clouds that have no darkness, and only exist to illumine, were seen in fathomless intervals between the solemn and orbed repose of the stone pines, passing to lose themselves in the last, white blinding lustre of the measure-

less line where the Campagna melted into the blaze of the sea.—*Ruskin.*

HAPPINESS is *not* what we are to look for. Our place is to be true to the best which we know, to seek that and do that; and if by "virtue its own reward" be meant that the good man cares only to continue good, desiring nothing more, then it is a true and noble saying. But if virtue be valued because it is politic, because in pursuit of it will be found most enjoyment and fewest sufferings, then it is not noble any more, and it is turning the truth of God into a lie. Let us do right, and whether happiness come or unhappiness it is no very mighty matter. If it come, life will be sweet; if it do not come life will be bitter—bitter not sweet, and yet to be borne. On such a theory alone is the government of this world intelligibly just. The well-being of our souls depends only on what we *are;* and nobleness of character is nothing else but steady love of good and steady scorn of evil. The government of the world is a problem while the desire of selfish enjoyment survives; and when justice is not done according to such standard (which will not be till the day after doomsday, and not then), self-loving men will still ask Why? and find no answer. Only to those who have the heart to say, "We can do without that; it is not what we ask or desire," is there no secret. Man will have what he deserves, and will find what is really best for him, exactly as he honestly seeks for it. Happiness may fly away, pleasure pall or cease to be obtainable, wealth decay, friends fail and prove unkind, and fame turn to infamy; but the power to serve God never fails, and the love of Him is never rejected.—*Froude.*

IT is sad to think that the once genial earth produces, in every successive generation, fewer flowers than used to gladden the preceding ones. Not that the modes and seeming possibilities of human enjoyment are rarer in our refined and softened era—on the contrary they never before were nearly so abundant—but that manhood is getting so far beyond the childhood of their race that they scorn to be happy any longer. A simple and joyous character can find no place for itself among the sage and sombre figures that would put his unsophisticated cheerfulness to shame. The entire system of man's affairs, as at present established, is built up purposely to exclude the careless and happy soul. It is the iron rule in our day to require an object and a purpose in life. It makes us all part of a complicated scheme of progress, which can only result in our arrival at a colder and drearier region than we were born in. It insists upon everybody adding somewhat—a mite perhaps, but gained by incessant effort—to an accumulated pile of usefulness, of which the only use will be to burden our posterity with even heavier thoughts and more inordinate labors than our own. No life now wanders like an unfettered stream; there is a mill-wheel for the tiniest rivulet to turn. We all go wrong by too strenuous a resolution to go right.—*Hawthorne.*

THERE is one law interwoven into the constitution of things which declares that force of mind and character must rule the world. This truth glares out upon us from daily life, from history, from science, art, letters, and from all the agencies which influence conduct and opinion. The whole existing order of things is one vast monument to the supremacy of mind. The exterior appearance of human life is but the material embodiment, the substantial expression of thought, the hieroglyphic writing of the soul. The fixed facts of society, laws, institutions positive knowledge, were once ideas in the projector's brain—thoughts which have been forced into facts. The scouted hypothesis of the fifteenth century is the time-honored institution of the nineteenth; the heresy of yesterday. the commonplace of to-day. We perceive, in every stage of this great movement, a spiritual power, to which we give the name of Genius. From the period when our present civilized races ran wild and naked in the woods, and dined and supped on each other, to the present time, the generality of mankind have been contented with things as they were. A small number have conceived of something better, or something new. From these come the motion and ferment of life; to them we owe it that existence is not a bog but a stream. These are men of genius.

AMONG the strange metaphysical doubtings which human nature discovers in itself, there is such a fact not seldom experienced, as the dreaming of a dream. It is one thing to dream utterly, so that one believes that one is awake; it is another to sleep in one's dream and in a vision give way to vision. It is done in sleep, it is done also in life. It is done in life as to many forms of living—as to religion, as to art. People are religious, not infrequently because they are in love with the idea of being so, not because they are simply and directly devoted to God. They are æsthetic because "The Beautiful" is so beautiful, to see and to talk of, and they choose to affect artistic having and doing; but they have come even into that sheep-fold by the door, by the honest, inevitable pathway that their nature took because it must—by the entrance that it found through a force of celestial urging and guidance that was behind them all the while, though they but half knew it or understood.—*Mrs. Whitney.*

WITH our *Philosophes*, the only virtue of any civilization was what they call "Honor," the sanctioning deity of which is that wonderful force of public opinion? Concerning which virtue of Honor, we must be permitted to say that she reveals herself too clearly as the daughter and heiress of our old acquaintance Vanity. * * * Without some belief in the necessary, eternal, or, which is the same, in the supramundane, divine nature of Virtue, existing in each individual, what could the moral judgment of a thousand or thousand thousand individuals avail us.—*Carlyle.*

TIME was when geology was cited as a witness against the Mosaic record of creation: perhaps the time is not far distant when Moses will be deemed the Great Geologist, the father or the decree that demands "infinite time" as its postulate. In a recent conversation, a gentleman who is a disciple of Darwin and an enthusiastic geologist, made this remark: "Geology and Genesis agree so perfectly in the great outlines of creation that I am at a loss to know *where Moses got that information.*" Saul among the prophets again, but which is Saul, Moses or geology?

THE faculty of love and of admiration is to be regarded as the sign and the measure of high souls: unwisely directed, it leads to many evils; but without it, there can be no good. Ridicule, on the other hand, is indeed a faculty much prized by its possessors; yet, intrinsically, it is a small faculty; we may say, the smallest of all faculties that other men are at pains to repay with any esteem."—*Carlyle.*

IT is less the severity of the teacher than the aptness of the pupil that secures the lesson; nor do the purifying effects of frustrated Hope, and Affection, which in this world will ever be homeless, depend on the worth or loveliness of its objects, but on that of the heart which cherished it, and can draw mild wisdom from so stern a disappointment.—*Novalis.*

NOTATION AND NUMERATION.

IN order to teach notation and numeration properly, the teacher requires a *numeral-frame*. One with ten balls on a wire is preferable to any other. If his school is not supplied with one, he should provide himself with a number of marbles, peas, or pebbles.

The class being ready for the lesson, and all the balls on one side of the frame, the teacher begins the lesson by asking a pupil to put *one* ball over to the other side of it. Another pupil is then asked to put over another ball. The pupils are then required to state how many *one ball* and *one ball* make. Another ball is then put over, and now they are asked how many balls do *two balls* and *one ball* make, &c. This should be continued till the pupils can count readily and intelligently any small number of objects.

To teach the notation of numbers between 10 and 99, inclusive, the teacher should use *two* wires of the frame, and rule two upright columns on the board. He asks a pupil to to count *ten* balls on the first wire, and he then puts them back and puts out *one* on the second wire. He tells his pupils that this one ball on the second wire is to represent the ten on the first. He also tells them that the figure representing the number of balls on the second wire is to be put in the second column. The one representing the number of balls on the second wire is then put in the second column, and the class is informed that the other column must be filled by the figure representing the number of balls on the first wire. If his instruction has been understood, he will have no difficulty in drawing from the class that he must make use of a new figure, one to represent no balls. He makes this figure, and thus has the number that represents 10 balls on the board. The teacher then puts one ball on each wire, and the class will be able to tell him that they represent eleven balls. Some pupil is then required to write down the figures representing 11 in their proper columns; then he puts out one ball on the second wire and two on the first, and, as before, ascertains what these represent and how to write the figures denoting this number on the board.

When the class reaches twenty the teacher puts *two* balls on the second wire and none on the first, and the class will be able to tell him that they represent two groups of ten balls each, or twenty balls. The two is put into its proper column and the first one filled up as before, etc.

This exercise should be continued until the class can tell at a glance the number to be written down from seeing the number of balls on the two wires.

When the class can readily write down and read any number of two figures, it is then introduced to numbers consisting of three figures. A third wire is used and another column ruled on the board. Ten balls are counted out on the second wire, and as the teacher puts them back he puts over one on the third wire and explains that this one is to represent the ten balls on the second wire. The class should now be able to tell him that this *one* ball stands for *ten groups of ten balls* each, or one hundred balls. The number 1 is now entered in the third column on the board, and the other two columns are filled as before by figures representing the number of balls on the second and first wires. The pupils should be thoroughly drilled in reading at a glance the number of balls to be represented from seeing the number of balls on each of the three wires, and at the same time they should be required to write this number down. This lesson should be repeated and repeated until the pupils can write down and read any number of three figures without hesitation.

It is now time to begin to teach the names of the three places. The teacher should first explain what *unity* is. He does this by putting out say four balls on the *first* wire and the class will be able to tell him that these are four *ones*. He then gives them the new word for one, UNIT. He should drill the meaning of it into the class by many examples, and then proceed to the second wire: as the class already knows that each ball on this wire represents a group of ten, 3 balls will represent 3 tens. He should proceed in a manner with the hundreds.

As soon as the class can write down and read any number of three figures, all that remains to be taught is the order of the periods, for in writing down or reading any number, however large, *one has never to write or read more than three figures at once.*

In reading or writing down a large number there are three steps to be taken:

1. Show the pupils the mode of dividing it into *periods* or groups of *three* figures, counting always from the *right* hand. This separation into groups may be effected by a comma, an upright line, or a hyphen.

2. Accustom the pupil to read the figures in these periods *exactly as if written by themselves:* thus 371,-408,072 should be read three hundred and seventy-one, four hundred and eight, seventy-two.

3. When the pupils can do this well, teach them the names by which the periods are distinguished

from one another. In doing this, the number with the names of the periods should be put thus:

Millions.	Thousands.	Units.
271	408	072

The pupils should now be required to read the figures in each period as before, but now they add the name of the period.

The number will now read three hundred and seventy-one *millions*, four hundred and eight *thousands*, and seventy-two *units*.

After some time they should be required to drop the word units, it being generally omitted. A pupil taught in this manner will be able to read or write down any number. He will have a clear perception of the use of the zero and will understand the difference between the *simple* and the *local* value of a figure.—*Canada School Journal.*

"AMERICAN PUBLIC EDUCATION:"

EDITOR SCHOOL JOURNAL:—The article in the December number of *School Journal* on "American Public Education," by J. G. Holland, seems to me so incorrect in conclusions that I beg leave to offer a few thoughts derived from my experience as a teacher. Although conscious of my weakness when compared with so eminent a writer as Dr. Holland, yet I cannot refrain from urging my protest against some of his assertions.

1. He says, "There must be something radically wrong in our educational system, when youth are generally unfitted for the station which they are to occupy." The assertion that our youth *are* unfitted for the station which they are to occupy, by reason of their education, is *only* an assertion, and if it were a proven fact, it carries an idea of caste with it utterly at variance with our boasted freedom or equality. Who among us would dare say to a bright lad striving to keep with or to go beyond his class, "I would not work so hard. You belong to poor people; most likely your lot in life will be no higher than theirs; and if you learn enough to enable you to read, write and keep your accounts correctly, it will be all the education you require." Who dare assign station to any boy with ordinary ability and ordinary advantages?

Again, "They are forced into professions for which they have no natural fitness." Who forces them?—their teachers?—their education? That question is so absurd, one need not answer it. But there is some truth in the assertion. Here is the force—the recognition of the society which controls the most money! I do not say "best society," because—leaving out some individual exceptions, barely sufficient to prove the rule—our so-called "best society" is only best in regard to money and display. A bright boy, whom I know, gave me a new thought on this subject. He is a born contriver of conveniences, and his favorite pastime is the designing of exquisite little arrangements, brackets, etc. I said to him, "You should study drawing, and when you come to select a trade let it be cabinet making, or artistic furniture designing." He replied, slowly, "Yes, I should love that, but I have no father, and I cannot afford to do as I like. I have thought it all over, and I shall be a dentist or a surgeon." Astonished, I could only ask his reason. "Why," said he, "for my little sisters' sake, I must have a position in society which no amount of skill in a trade will give me. That would not help them, and they are as good and deserving as any other girls; on the other hand, it would injure them. But if I am the poorest professional man, my sisters and myself will be welcomed in the best society, and there is some field for mechanical talent in both dentistry and surgery." These are the exact words of a boy not yet fifteen years old, and what could I do but listen silently.

Not very long ago, a man who has risen from mediocrity to a high position, came to see my school and thought to edify my boys by informing them that all we needed was educated labor to keep the Chinese and other foreigners out of the country. He paid quite a glowing tribute to the "learned blacksmith," and some other men of that kind. It was just before recess, and, it being a rainy day, some of the boys remained near my desk in conversation. One boy said, "I guess he never heard the song—

"'Uncle Sam is rich enough to give us all a farm.'"

Another said, "His talk sounds well, but he don't mean it. I've heard him before, and I have watched his door when he had two large parties, and I never saw a mechanic of any kind go in; and there are several mechanics in town who know more than he does. But Mr. —— and Mr. —— were there, and every one knows that one of them can't keep his books, and the other only learned to write his name, so as not to make a cross on a deed."

Again: "Humble employments are held in contempt." May I ask by whom? Surely it is not by the chidren, but by older people. Children are taught this by the world around them, and by the constant disrespect that they see shown to people in humble employments.

"The multitude dress beyond their means, and live beyond their necessities." True, but why? Simply for the reason that it is their only hope of being recognized by the moneyed society. "The multitude" know full well that no amount of brains or religion, culture or purity, will obtain for them a welcome in "society," and so they cultivate the qualities and strive for the positions that will secure such recognition for their children. In this great country of ours it will not do to teach theoretical independence, and practice abject humility to people who have money. Even infants detect shams. Is any one idiotic enough to suppose that the great thieves lately exposed became such from a miser's love of money? No. It was love of the power that money brings, and the "chiefest seats in the synagogue."

Children see and think about these things as well as ourselves. Here are two more living witnesses. Lately, in hearing two boys recite their catechism in Sunday-school, when we came to the sentence, "To order myself lowly and reverently to all my betters," one stopped and said, "I can't say that; and when I am a man that sentence will go out of the book." The other laughed and said, "Oh, that's not hard to *say*. Easy enough to be reverent, the trouble is to find the 'betters.'" Then turning to me, he said, or rather asked: "It is not God—what does it mean, very old people who are good, or those who live in better houses than we do?"

And this is "Young America"—this the bright, keen and impulsive creature whom we are trying to train into a thoughtful and useful member of the "body politic." As well say to the raging sea, "thus

far shalt thou go," as to set bounds to the ambition of a bright child who can think.

Dr. Holland closes by saying, "Let us have this altogether reformed." Here I agree with him, but the "*this*" to which he refers would not aid the reform. If all the teachers in the states were to give daily lessons in contented humility, they would influence no child who had brains enough to be discontented, unless it might be to create in that child a contempt for the teacher. No, the reform must come in another way. Open the doors of good society to the cultured, refined and industrious, without reference to family, money or occupation, and close the doors to the ignorant, coarse and indolent, and we shall soon hear no more complaining of the "humble powers everywhere making high employments contemptible." L. RYNDER.

Clearfield, January, 1878.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, FEBRUARY, 1878.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

FROM a slip received from Hon. J. H. Gross, State Superintendent of Free Schools in the State of Delaware, we learn that the whole number of white children in that State between the ages of 5 and 21 years was during the past year 31,849, the number of colored children 3,800, the number of both attending free schools 24,061. The school propertyof the state is valued at $450,956.64.

LAFAYETTE COLLEGE is always ready to extend a helping hand to common school teachers. President Cattell and Professors Porter and Coffin took a prominent part in the proceedings of the late teachers' institute of Northampton county, held at Easton.

AMONG the names appearing most frequently and prominently in the institute work of the past season we notice with pleasure those of N. C. Schaeffer, Principal of the State Normal School at Kutztown, and J. V. Montgomery, Professor of Penmanship and Drawing at the State Normal School at Millersville. Prof. Montgomery has, we understand, prepared a system of instruction in drawing, which is about to be published. We have no doubt it will be well suited for introduction into our common schools.

AN old school friend writes us that he wants to sell at about two-thirds of their cost several educational publications as follows: J. Orville Taylor's "Common School Assistant" 1836 to 1840—four volumes bound in one. Twenty-six Annual Reports of the Superintendent of Pennsylvania Common Schools, between 1840 and 1874. Sixty scattering numbers of Calkins' "Student" 1840 to 1860. Three bound volumes, three unbound, and forty odd numbers of "Pennsylvania School Journal," vol. 1 to 13. Fifty odd numbers of the "Opal," and seven numbers of the "Journal of Insanity." We hope we oblige some one wanting to purchase, as well as the owner, in mentioning the above. Inquire of C. N. Worden, New Milford, Susquehanna county, Pa.

A PAMPHLET copy of the "Proceedings of the State Colored Educational Convention" held at Frankfort, Kentucky, August 22, 1877, has come into our hands. The convention seems to have been attended by the leading colored teachers in the State, and was quite a spirited meeting. Dr. Henderson, the Superintendent of Public Instruction, was present at all the sessions, and quite likely was the "power behind the throne." A constitution was adopted, and future meetings are to be held regularly. The movement can hardly fail to be productive of good.

WE have received from Professor Lewis Felméri, Kolozsvar, Hungary, a little pamphlet containing "Rules of the English Conversation Club at Kolozsvár." The club holds one meeting every week, and during the meeting the conversation is carried on exclusively in the English language. There has been established in connection with it a library of English books and papers. The rules and proceedings of the club seem to us to be admirably adapted to give the members a knowledge of the English language and practice in speaking it. There are many such clubs in Hungary.

OUR advices concerning the prospect of having the educational interests of this country represented at the Paris Exposition are by no means encouraging. The resolutions concerning the subject passed by the Department of Superintendents at the late

meeting in Washington were placed in the hands of the President and in those of Governor McCormick, the Commissioner-in-chief on the part of the United States. The President in acknowledging their receipt stated that the whole subject was in the hands of the Commissioner, who, as far as is known, has paid no attention to it. The educators and educational interests of the country may therefore consider themselves ignored. It is all well enough to make fine speeches about free schools, to eulogize them as vital to the success of free institutions; but when as an interest they come in contact with something that has money in it, they are invariably pushed to the wall. The one thing above all others that foreigners will expect to see in the American exhibit at Paris will be a representation of our schools and systems of education; and no matter how complete the exhibit may be in other respects, it will be *headless* and *rootless*, incapable of interpretation, without it.

It may be answered in behalf of the Commissioner that he is as willing to receive applications for space from teachers and the friends of education as from others. This is no doubt true; but a creditable educational exhibit cannot be organized by waiting for voluntary contributions. This was the fatal mistake of the Centennial authorities—the mistake that broke the educational exhibit up into fragments, placed these in out-of-the-way places, and prevented the grandest display of educational appliances and products that the world has ever seen. We had hoped that something might be learned from this experience, and that at Paris we would be allowed to correct the faults at Philadelphia, but the hope seems likely to be a vain one. Had Governor McCormick at once appointed as an assistant commissioner, as requested by the united voice of all the school men of the country represented by the Department of Superintendents, a gentleman competent for the task of organizing an educational exhibit, and directed him to go to work without a moment's delay, there might now be awaiting shipment at New York or Philadelphia, an exhibit that would have done credit to the country, and won it more honor than all else we can send to Paris. It is now too late, and we may have to wait a generation for another like opportunity.

DOES the author of the articles on Teachers' Associations in the "*Educational Voice*" pretend that he is writing history? We had read his articles relating to Teachers' Associations in Allegheny county, with interest, taking it for granted that he was stating facts, until our attention was called to one in the November *Voice*, in which some statements are made concerning the proceedings of the meeting of the State Teachers' Association held in Pittsburgh in the year 1855. As stated, the leading feature of the meeting was a discussion on County Normal Schools, then a newly-established educational agency. The author of the articles asserts that on this subject "no definite result was arrived at." Let us see. The resolution upon which the discussion took place was offered by Mr. Stutzman, of Somerset, on the first day of the meeting, and is as follows:

"*Resolved*, That we view the establishment of schools for the professional training of teachers in the several counties as among the best results of our present school system, and recommend the matter to the attention of county superintendents, teachers, and friends of education throughout the State."

To this resolution Mr. Burtt, of Allegheny, subsequently offered the following amendment:

"But we think a county superintendent should not be pecuniarily interested in any such school."

The editor of this *Journal*, then County Superintendent of Lancaster county, was present, and although in favor of the original resolution, voted for this amendment and thought it right, as he does now. The feeling in favor of these county normal schools was so strong, however, that on the afternoon of Thursday, the last day of the meeting, the amendment was voted down, and the resolution carried. See *Pennsylvania School Journal* for September, 1855. No action could be more decisive or "definite."

Again, the author of the articles in the *Voice* states that "such schools," meaning the county normal schools, "were held in many counties until the year 1860, when Thomas H. Burrowes, having become State Superintendent, ordered them to be discontinued." Now, Mr. Burrowes had no right as State Superintendent to issue such an order if he had been disposed to do it, and there is abundant proof on record to show that instead of discouraging the county normal schools, or normal institutes as they were more generally called, he always lent his influence, official and otherwise, to establish them and render them efficient. It was a favorite idea with him to plant these schools in the counties and let the strongest of them grow into State Normal Schools under the act of 1857, of which he was the

author. Besides, the fact is that numerous schools of the kind flourished all the years of his administration, and even down to the present time, although the State is now well supplied with State Normal Schools.

The author of the articles in the *Voice*, also gives Dr. Burrowes the credit of obtaining "State aid to teachers' institutes." Dr. Burrowes may have in a general way said something in favor of such aid, but the measure was not one of those to which he gave much attention. The law on the subject was not passed until 1867, and was then prepared and pushed through the Legislature by other hands. Dr. Burrowes even opposed in *The School Journal* at the time the series of measures of which it was a part.

We, of course, are altogether incompetent to pronounce upon the reliability of the articles we have criticised as a whole; but we do say that if they contain as large a proportion of errors as the sketch of the meeting of the State Teachers' Association included in them, they had better never have been written. Accuracy is the very soul of history.

GOVERNOR ROBINSON, of New York, has again declared his opposition to public high schools. The following is an extract from his annual message:

In my judgment a very great wrong has already grown up in connection with our otherwise excellent system. It lies in the principle of applying large amounts of the moneys raised by taxation to the support of high schools, and instruction in all the sciences and higher branches of study required in the learned professions. I can find no excuse for raising money by general taxation for such purposes. The only good reason which can be urged for taxing one class of citizens for the education of the children of another class, is the necessity of giving to the children of all classes a sufficient common school education to enable them to understand their duties, and exercise their rights as citizens of a free country governed by the popular voice. When we go beyond this and take from one man the money necessary to educate the children of another man in the arts and sciences, we perpetrate an act of injustice under the forms of law. What is worse than this, instead of educating the masses of children so as to prepare them for the pursuits and industries upon which they must depend for a living, we educate them in such a way as to make them discontented with their condition, unfit to discharge its duties in a manner most beneficial to their own interests, and take away the strong incentives which impel those who are really able and worthy to win for themselves high positions in learning and usefulness. When the State has given to all the children a good common school education, it should then leave them to their own resources, and to follow such callings in life as their capacities fit them for—to go beyond this is to injure rather than benefit them.

These and several other suggestions upon this subject were referred to in my last annual message, with a caution to avoid any abuses of our school system which would bring it into disrepute and loosen the hold which it now has upon the favor of the community. I commend these suggestions to your consideration.

EDUCATION AMONG THE CORNPLANTER INDIANS.

[It is generally known that a small remnant of the once powerful Cornplanter Indians still remain in this State. For a number of years the State has appropriated $300 annually to keep open a school among them. The following correspondence will show how greatly they appreciate this bounty, and give some insight into their condition and prospects.]

LETTER OF THE INDIANS.

To J. P. WICKERSHAM, *State Supt. of Public Instruction.*—By a general agreement of all of the Indians on Cornplanter reservation, a meeting was called at their school-house on said reservation in Elk Town, Warren county, Penna., this 3d day of January, A. D., 1878, for express purpose to write and send thanks to you for money appropriated to educate our children with. Meeting was called to order. John Jacobs was elected to the chair, who called for George Bennet to act as secretary. The following resolution was adopted: That we send our sincere thanks and feelings for that deed. That though we older ones never had as good a chance as our children, we cannot help but see the benefit of an education to our children—and we hope you will not consider the money thrown away, that you will be satisfied that it is put to a good use, and that our school has never been so satisfactory, well conducted, done so much good, and been made of so much interest to both old and young as the present teacher has made it for the last year. Also, we approve his plan of not allowing our children to use Indian language around the school-house. Also approve of allowing the white children to attend our school. Also do we feel encouraged that we may become more intimate with the whites. In days past our great-grandfather, Cornplanter, said we would see this day. That we now see it—how much better off a man is with an education than without. Therefore, hoping that you will not become discouraged in helping, we send our sincere thanks to you.

Respectfully,

JOHN JACOBS, *Prest.*

MARSH PIERCE, *Sec.*

Address, Corydon, Warren co., Pa.

REPLY.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, PA., *January* 11, 1878.

To JOHN JACOBS and MARSH PIERCE, President and Secretary of a meeting of Cornplanter Indians, held at Elk Town, Warren county, Pa., January 3, 1878:

I have read the proceedings of your meeting with much pleasure. I am glad you have a good school and that you want your children to learn all they can. I will do my best to have the State continue to grant money to keep your school open. You are now the only Indians we have in the State, the last remnant of a once powerful race, and all good men desire to take care of you and to have you live with our people forever. I have for many years thought of paying you a visit, but my time has been so taken up that I have not been able to do it. I now think I will come next summer. I will let you know when I conclude to come.

I will print your letter in *The School Journal* and send you a copy. Please tell all the Indians what I have written you.

Yours, very truly,
J. P. WICKERSHAM,
Supt. Public Instruction.

EDUCATION THE REMEDY.

FOR THE WRONGS OF THE WORKINGMEN.

THE following paragraphs from the late message of Governor Hartranft contain words of wisdom. Not only every workingman but every citizen would do well to ponder them:

Passing from these secondary matters to the broader and deeper lessons of the strike, while there is much to cause solicitude, there is much, also, to awaken confidence in the final solution of the problem. While capital held labor in ignorance and bondage, strikes were rare. Their frequent occurrence is a proof that labor is growing, more and more, to an equality in strength and importance to capital. Intelligence has spread itself among the laboring classes, they have learned to read and write, and to interchange their views, and formed associations, according to their new lights, for their protection and advancement. And if in this, as in many other cases, "a little learning is a dangerous thing," it is yet better than no learning at all, and is the progressive step to higher intelligence. On the other hand, under the influence of civilization, wealth became more and more diffused, and corporations grew up to collect the large and small amounts of unemployed capital, build the gigantic works and conduct the great industries required by modern society. These two results are the inevitable consequences of increased intelligence and civilization. These great corporations, from the character of the enterprises, are of necessity, in most cases, monopolies. As such, the people have a right to demand that while the profits may accrue to private individuals, their management shall rise above mere selfish aims, and consult also the public utility and welfare. It has come to pass that in the conflict between capital and labor, the former is almost wholly represented by corporations and the latter by various organizations.

The attitude of the people towards these two forces during the great strike has also deep significance. In the general sympathy for the strikers, dulled only by their own unlawful acts, the workmen have assurance that in all right and lawful efforts to better their condition they will have the aid of nearly all classes of their fellow citizens. And in the prejudices against the corporations, those who control them may realize that the possession of great wealth and the control of great enterprises impose obligations to the public which they cannot afford to ignore. In these facts we can discern the two roads that may eventually lead to the final settlement of the contest—the diffusion of higher education among the workingmen, and the conviction, on the part of capital, that it has now to deal with an equal competitor, whose claims and rights, together with its own, must be decided and adjusted by arbitration. In this contest the primary duty of the State is to keep the peace, and secondarily, so far as laws will avail, to hasten the consummation of the result.

There are several thoughts in these extracts to which we desire to call special attention. The first is that a "strike" is an indication of growing intelligence on the part of the workingmen who take part in it. No such thing ever happens among laborers who are wholly ignorant. In this condition they are either sullenly or stolidly content with their lot or so wanting in intelligence as to be unable to contrive means to improve it. With education among the working classes, they begin to think out plans of bettering their condition, of securing higher wages; and hence associations for self-protection and mutual assistance, petitions for redress of grievances, and strikes.

The second is a complement of the first, it is that the way to prevent strikes is to provide a better education for the laboring classes. A body of workingmen resolve upon a strike because they feel they are suffering a wrong and can see no other way of obtaining a remedy for it. More information on the subject would show them that those most injured by a strike are nearly always the strikers themselves; and a better education would enable them to discover more effective means of protecting their interests and securing their rights. The power that rules both capital and labor is intelligence, and when a people reach a certain stage of intelligence, all antagonism between them will come to an end.

The Governor is of the opinion that a "higher education" is the right remedy for the wrongs of the laboring classes. We too believe that a workingman can do more to increase his wages, to improve the character of his work, to elevate his condition, to secure his rights by educating himself, then in any other way. And we do not mean in saying this that he should educate himself or his children *out of his business* but *in his business.* Let him become intelligent, a master of his business, knowing his rights and knowing how to maintain them, and *his* side of the great labor problem will be solved.

GOVERNOR HARTRANFT ON EDUCATION.

PENNSYLVANIA has never had a Governor who has shown more interest in the work of education than Governor Hartranft. Every one of his annual messages contains valuable statements and judicious suggestions on the subject. He is what most Governors are not, a reformer in educational matters. He is not at all content to occupy the ground already conquered, but boldly leads an advance into the enemy's country. And such is the confidence of the friends of education in his generalship that there is not a man among them who will not gladly follow him. The extracts below are from his late message:

EDUCATION IN GENERAL.

The views of the Superintendent of Public Instruction correspond so nearly with my own that I need do little more than call attention to his report. He repeats the recommendation for a revision of the school laws, and I trust you will see the advisability of bringing the original enactments, supplements. usages and decisions into one concise and logical code. The money appropriated to pay the indebtedness of the Normal Schools was apportioned among those institutions, in accordance with the intention of the Legislature. Although relieving them from temporary embarrassment, it will be necessary to provide for their future welfare. Normal Schools are an essential part of a public school system, and the Legislature will, no doubt, see that those of Pennsylvania are not restricted in their sphere of usefulness by the want of funds. I fully recommend the trial of the cautious system of compulsory education of vagrant children, proposed by the Superintendent, and have elsewhere given my views on the subject of industrial schools and workshops, which he fortifies by his arguments and facts and examples, proving the feasibility of the scheme.

The report of the Superintendent of Soldiers' Orphans presents a satisfactory record of the progress and health of the wards of the State, and conveys the gratifying intelligence of the welfare of those who have completed the course, "nearly all of whom are at work—many engaged in the simpler kinds of hand labor, but many at trades, on farms, or in the professions." Under the laws, the Orphan Schools close finally on the first day of June, 1879, and it will be necessary for the present Legislature, if it desires to continue the bounty of the State, to provide for the two thousand children, between the ages of four and sixteen years, who will then be left in them. Of the three plans set forth by the Superintendent, it seems to me that either the first, to repeal the act closing the schools in 1879, and allow the system to run on to its natural end, or the third, discharging all children over a certain age, or for whom suitable homes can be found, and providing for the rest in the homes for friendless children which exist in various parts of the State, will close this noble undertaking as it began, in charity. The pride and pleasure they have felt in the work, the satisfaction they have derived from its happy results, leave no doubt that the adoption of either course will meet the warm approbation of the people of Pennsylvania.

INDUSTRIAL AND SCIENTIFIC TRAINING.

It is impossible to read the industrial history of the country without being struck with the decline of the system of apprenticeship, the decadence of skilled labor, and the rapid increase of common day laborers. Many causes have been assigned for these results. The invention of labor-saving machines, the minute sub-division of labor, and the intense competition among producers and manufacturers have, no doubt, served to lessen the pride of the workman in his work, and made it impossible, in many instances, to give any time or opportunities to mere learners. To counteract these influences, the assistance of the State will be required. But another cause, arising from the misdirected efforts of the workingmen themselves, can only be removed with their co-operation. Trades unions and various labor organizations, which profess to elevate the condition of the laboring classes, have, in reality, materially contributed to impoverish and degrade them. Millions of dollars have been collected from workingmen and squandered in profitless strikes, during which other millions have been lost through enforced idleness, without even a transient effect upon the natural fluctuations of wages. The independence of individuals has been sacrificed to the tyranny of a class, and they have gradually learned to depend for prosperity upon other agencies than their own personal industry and thrift. The regular education of skilled mechanics has been restricted by the same agencies, forcing the growing generations into the undistinguished mass of day laborers, the lowest and poorest paid of any class, and reducing the nation to the necessity of supplying its skilled labor from foreign countries. These things strike at the welfare of labor and the prosperity of the State. Even from the workingmen's standpoint, no good that it seems possible to derive from such means can compensate for the deteriorating effects upon the condition and *morale* of the laboring classes. The growth of the individual is dwarfed, his substance wasted, and his children deprived of their rights. The doors of his own trade and all others are closed against them by his fellow-workmen, and they must enter another calling, or become the mere drudges of society. As long as the trades are closed, as at present, we must never complain of overcrowded professions and commercial pursuits, of a lack of skilled mechanics and an excess of common laborers,

In this question not only the workingmen, but the

State also, is deeply concerned. "The great warfare of the nineteenth century is industrial warfare; the struggle between great nations for supremacy in various industries and for control of the various markets." Several foreign nations and a few of the States have foreseen the conflict and begun to educate their people. Pennsylvania has unrivaled resources, but unless she prepares for the competition, she must content herself with the production of raw materials and her people become the hewers of wood and drawers of water for more highly cultivated communities. The means must be the diffusion of technical knowledge among the laboring classes; securing the co-operation of the workingmen; creating new industries and diversified interests, and throwing the ways to honorable and lucrative employment open to all. The work of the schoolmaster must undo the work of the demagogue, and the State supplant the bigoted organizations of labor with industrial schools and workshops. If the workingmen will spend the money now used in keeping up such organizations, and lost in strikes, in keeping their children at such institutions and co-operating with the State, the dignity and average value of labor will be rapidly raised. Heretofore public education has been too much in the interest of a class. The influence of the old scholasticism has been powerful enough to overbear the force of modern industrial and scientific demands. The resultant has leaned too much in one direction, and undue prominence has been given to professional and classical education over industrial and scientific training.

A thorough system of industrial training must embrace the children, the workingmen and the people. The children of skillful and prosperous mechanics might find in the primary schools instruction in mechanical and free-hand drawing; and to those who are circumscribed by harder conditions, free night schools could furnish the opportunities of a slower advancement. Reform industrial schools, under a wise system of compulsory laws, could gather the children of utterly destitute or vicious parents and educate them for a useful calling, without contact, on the one hand, with acknowledged paupers or criminals, or lowering the public schools, on the other hand, with offensive poverty or low associations. In addition to the theory, it may be necessary for the State to afford practical training in the mechanical arts. It is not probable that the old system of apprenticeship, which has gradually fallen into disuse, can ever be generally restored. Two causes alone would seem to be sufficient to prevent it. In the extensive modern workshops the proprietor, or master mechanic, or foreman, can never find time to devote to the instruction of apprentices, who are consequently left to pick up, in a desultory manner, what little they learn, and in many industries the necessity of producing articles at the least labor and expense, to compete with others in the markets, requires the highest skilled laborers, for which they must depend upon the overstocked labor markets of the old countries, as they cannot afford to educate new hands. Believing that, under these circumstances, no remedy can be found, except through the direct agency of the State, I renew my recommendation contained in the message of 1875, for the establishment of workshops in connection with industrial schools, and beg leave to refer you to the current report of the Superintendent of Public Instruction for the proofs he has collected of the feasibility and advantages of the plan.

It will perhaps be a slow and difficult task to secure the co-operation of the present generation of workingmen. But in all the large cities and towns, where that class is principally congregated, lecture and draughting-rooms could be added to the night schools, and such instruction given as would interest and benefit adults. Everything that will tend to recognize the importance and dignity of labor, that will excite the pride and emulation of the artisan in his work, convince him of the interest of the State in his welfare and the welfare of his children, and secure the fruits of his industry and thrift, should be done, and I am convinced that nothing will contribute so much to these results as the establishment of industrial and scientific schools and workshops by the side of our present high schools and academies. Finally, the appreciation and demand of works of art and skill must keep pace with the capacity to create them. Museums, art galleries, and other public collections are also important factors in industrial education. Accordingly, I took occasion last year to recommend the arrangement for public exhibition of the specimens collected by the Geological Survey, and to suggest that you consider the advisibility of extending the State aid to the Philadelphia Museum and School of Industrial Art. The latter institution has, during the year, opened free schools of drawing and design, and as the State, if it decides to add industrial education to the public school system, will need competent teachers in these branches, this fact gives it additional claims to the recognition of the authorities. I venture to hope that this subject will early engage your labors, and that the public school system will receive a symmetrical development corresponding with the conditions of a highly industrial age, and the large and varied resources of Pennsylvania.

THE MUNICIPAL COMMISSION ON EDUCATION IN CITIES.

THE Commission appointed by the Governor "to devise a plan for the government of cities" has made a report to the Legislature, accompanied by a bill. The bill is of great length, covering the whole ground assigned the Commission, but our special interest is confined to what is proposed concerning education. Very considerable changes are recommended in the school organizations of our cities, and their wisdom is a fair subject of inquiry. We hope the school boards and school men of the cities will give the subject immediate attention and make known their conclusions to their representatives in the Legislature.

The bill divides the cities of the State into five classes, and those contained in the several classes are as follows: First class, Philadelphia; second class, Pittsburgh; third class, Allegheny; fourth and fifth classes, in which the bill makes no distinction so far as education is concerned, Allentown, Altoona, Carbondale, Chester, Corry, Erie, Harris-

burg, Lancaster, Lock Haven, Meadville, New Castle, Oil City, Reading, Scranton, Titusville, Wilkesbarre, and Williamsport. In order that those whose interests are affected may have the whole subject before them, we present, first, what the commission has to say in explanation or defence of their work. This is done under the head of

DEPARTMENT OF EDUCATION.

The department of education is charged with the control of the public schools and educational interests in the several cities. In cities above the fourth class the members of the board constituting the department are to be elected at the same time, in the same manner, and for the same terms as members of select council, and in cities below the third class in the same manner, at the same time, and for the same terms as members of the common council. In all cities the qualifications of members of the board are the same as those required for members of the common council. The offices of school director and controller are abolished, the election of a superintendent of education by the board provided for, and all necessary powers for the efficient and economical management of the public schools are vested in the department created by the bill. The taxing power now lodged in the school boards of some of the cities of the Commonwealth, is taken from them and transferred to the legislative department, where it properly belongs.

In cities of the first, second and third classes, one-third of the members of the department are required to be elected every year after the first election under the act.

In Philadelphia, the school system as now organized differs from that of every other city in the Commonwealth. The entire city constitutes a district. The board of education consists of one member from each ward, appointed by the courts of common pleas. Sectional boards of directors, consisting of twelve members in each ward, are elected by the voters of the ward.

The sectional boards appoint the teachers and janitors. The course of studies is prescribed by the district board, which controls contracts for supplies and all expenditures, and prepares the estimates for the annual appropriations. For practical purposes, the system is without a responsible head, and its value may be known by a brief analysis of some of the official reports of results, as follows:

In 1840, the number of pupils was 23,192, and the cost of the system, $125,740, or rather less than five dollars for each pupil.

In 1850, the number of pupils was 48,056, and the cost of the system, $408,762, or about $7.63 for each pupil.

In 1860, the number of pupils was 63,530, and the cost of the system, $512,014, or about $8.05 for each pupil.

In 1870, the number of pupils was 82,891, and the cost of the system, $1,197,901, or about $14.45 for each pupil.

In 1875, the number of pupils was 95,552, and the cost of the system, $1,634,653, or rather more than $17 for each pupil.

Not more than twelve pupils in a thousand reach the high schools. Not more than one-fifth of all the pupils reach the grammar schools. Four-fifths of the whole number of pupils are found in the primary and secondary schools, and never pass beyond them. These are no better prepared for the occupations of life than those who were taught in the same schools thirty-seven years ago. There is certainly nothing which compensates the city of Philadelphia for the enormous increase in the cost of education within the last twenty years. The increase of salaries does not wholly account for it. The unnecessary multiplication of teachers and of school buildings with costly furniture probably does.

What is true of Philadelphia, in this respect, is applicable to the other principal cities of the State, to a greater or less extent.

While the common school system is the pride of the State, and justly dear to all citizens, the fact cannot be ignored that its administration in cities is affected by the vices which pervade their whole system of government; and after much earnest and anxious consideration of the subject, we are of the opinion that the change proposed will tend to restore the management of common schools in cities to its original simplicity, and limit them to their real purpose of preparing the child for the intelligent performance of the duties of life. It will also tend to promote economy by concentrating the taxing-power, and providing that the expenses of school districts and school boards shall be subject to the same supervision and scrutiny as the accounts of other departments of the city government.

The frequent changes of school books in some of the school districts, and the high prices charged for them, are matters of much complaint. In Philadelphia, books are supplied to the schools at the public cost. In all other cities of the Commonwealth they are purchased by the pupils. For their protection, the bill provides that text-books shall not be changed oftener than once in five years, and publishers who furnish them are required to give bond to the city that the price shall not be increased after their adoption, and that they will not sell such books at less than the price stipulated in their proposals in any other city or district.

Another great reform in connection with this department, which needs no elaboration, is that provision which prevents school teachers from being removed unless for cause, This prevents the making of a political machine out of the schools, and enables worthy men and virtuous women to retain places which they are fit to fill during good behavior—an incentive, surely, to the highest efficiency in the performance of duty.

THE BILL.

The bill prepared by the Commission relating to education appears in their general bill as Article XII. We give it below in full by sections, adding, as we proceed, some comments of our own:

Sec. 1. The department of education shall have control of the public schools and educational interests of the city. In cities of the first class, the department shall be managed by a board consisting of twenty-seven members; in the second, of eighteen; in the third, of fifteen; and in cities of the fourth and fifth classes, the number shall correspond with the number of members of common council, and be apportioned in like manner, and be elected for the same term. The office of school director and controller and school treasurer in the several classes of cities aforesaid is hereby abolished.

This section reduces in the cities generally the number of directors which compose the school boards. We are inclined to think this an improvement. We are sure it is an improvement to combine the central and local boards, where they exist, into one body.

Sec. 2. The members of the said board shall be elected and appointed in cities of the first, second, and third classes, at the same time, in the same manner, and for the same term, as members of select council, under this act; and in cities of the fourth and fifth classes, after the first election, they shall so divide the term of service that one-half the number, as nearly as may be, shall be elected annually.

The qualifications of members of the board shall be the same as required for members of common council.

We see no good reason why the school directors in all classes of cities should not be elected in the same way and for the same time. Why should these officers be elected in Allegheny, for instance, for three years, and in Harrisburg for only two years? The Commission does not seem to have provided at all for the election of school directors in cities of the fourth and fifth classes.

Sec. 3. The board shall elect a president, who shall be the head of the department.

Sec. 4. The board shall elect a competent person as superintendent of education, who shall have been, within six years, a practical teacher, and shall have taught, within said period, for at least two years, and shall be capable of deciding upon the qualifications of teachers. He shall perform such duties as may be required by the board. The provisions hereof shall not operate to disqualify any superintendent from re-election. The board shall also elect such teachers, officers, and employees, as may be necessary. All salaries shall be subject to the approval of councils. No teacher shall be removed, except for cause, under such regulations as the board may prescribe.

We endorse most fully the provision that "the board shall elect a competent person as superintendent of education;" but the Commission does not say whether it shall be done in accordance with existing laws or not. Such officers are now commissioned by the Superintendent of Public Instruction, and the State contributes quite largely to the payment of their salaries. If the Commission's bill shall become a law, are these provisions, and others relating to the subject, thereby repealed?

School boards are allowed by the Commission to elect teachers, officers and employees; but all salaries must be approved by the city councils. Upon what principle or for what reason are salaries made subject to the approval of councils? Have city councils heretofore proven themselves more economical, more discreet, or more trustworthy, in fixing salaries than boards of school directors? If they are supposed to know better what salary a teacher and other officers connected with the schools ought to receive than the board whose special duty it is to manage the educational department, would it not be well to dispense with the board entirely, and let the councils transact the whole business?

If there is any advantage to teachers in the proposition, "No teacher shall be removed, except for cause, under such regulations as the board may prescribe," we are too obtuse to see it.

Sec. 5. The Department of Education shall divide the city into convenient districts, for the purposes of education, and shall have power to alter or change the boundaries of such districts, at any time, as necessity may require, and shall appoint six visitors, for each of said districts, who shall, under such regulations as the department make, have the charge of school property in their respective districts, and shall visit the public school or schools of such district once in each month, and shall perform such other duties as the department may prescribe. Visitors shall serve without compensation and shall hold office one third for one year, one third for two years, and one-third for three years, unless sooner removed by the board; and, in case of vacancy, by the death, resignation or removal of any visitor, the board shall fill such vacancy for the unexpired term.

Sec. 6. The school visitors of the several sub-districts, shall, annually, on or before the fifteenth day of October, furnish the board of education with an estimate of the money necessary for the ordinary expenses of their sub-districts, exclusive of salaries of teachers, and an estimate of the sum necessary to pay the interest on their local indebtedness, if any exist, and to provide a sinking fund for the payment of said indebtedness at maturity.

If this provision in regard to school visitors had been made to apply only to Philadelphia and Pittsburgh to take the place of their local boards, there would have been some propriety in it; but as applied to all cities, large and small, it is clumsy and unnecessary, and, what is worse, it will lead to confusion and conflict.

Sec. 7. In cities, other than the first class, where there is now more than one school district, sub-school district or independent municipal school district, school buildings may be erected on petition to the department of two-thirds of the taxables of the district, the approval of the department, and an ordinance of councils making an appropriation for the same, for which a tax shall be levied on the taxable property of the district. But no money shall be expended, nor debt incurred, in any one year in excess of the tax levied for the purpose during the year, and liability upon the contract shall be limited to the amount of money which shall, from time to time, be appropriated for the work.

There would be very few school houses erected under this section, but fortunately we know of but a single city to which it will apply, if it will apply to that one. It must

have been written in entire ignorance of school affairs in the different cities.

Sec. 8. The board shall make rules and regulations necessary for the government and management of the schools.

Sec. 9. The board shall prescribe the text-books to be used in the public schools, which shall not be changed oftener than once in five years, but no books shall be hereafter contracted for or used in the schools until the publisher or publishers thereof, or persons proposing to sell the same, shall have named the price for which the books are to be sold to the department or pupils thereof, and such publishers or persons shall have given bond to the city, in such sum as may be prescribed by the board, that the price of the same shall not be increased, nor the material, printing, or binding of the books furnished be inferior in quality, during the period for which the books shall be adopted, and that they will not sell the books adopted, in any other school district in the United States or elsewhere, during such period, in any quantity, at any less sum than the price stipulated in their proposals. It shall be lawful, however, for the board, at any time, to prescribe text-books for new or additional studies, to be used until the time that the next general series shall all be prescribed.

There may be somewhat of good in section nine, but it would not be difficult to frame a provision very much better, covering the same ground.

Sec. 10. For the purpose of paying the interest on and creating a sinking fund for the extinction of the bonds and funded debt of the several school districts in cities below the first class, where such debt existed before the approval of this act, councils, upon estimates furnished by the Department of Education, shall annually, until payment of the debt be fully provided for, levy and collect a tax not less than one mill, nor more than three mills, on each dollar of the assessed value of the taxable property of each of said districts, which, when collected, shall be paid to the commissioners of the sinking fund, and shall be applied by them to the payment of interest and extinguishment of the bonds and funded debt of the district, and be managed generally by said commissioners, as in case of funds in their hands for redemption of city loans. The commissioners shall have power to issue new bonds of such school districts, whenever necessary, for the redemption of bonds of any of the districts or the funding of the present debt, at a lower rate of interest.

The policy of providing for a sinking fund is to be commended, but the whole matter would be just as well attended to if left in the hands of the school directors. The school debts of our cities are very small in comparison with the general municipal debts; and we venture to assert that school boards, although sometimes extravagant, have been more economical in the expenditure of the people's money than any other body of public officers.

Sec. 11. A tax may be levied by councils upon the taxable property of each in said school districts, upon the requisition of the department for the care, preservation, alteration, and repair of the school property in each of said districts, respectively. Such tax shall be levied in the annual appropriation ordinance, upon the same principles set forth in the article on finance, revenue, and taxation.

This section takes the taxing power out of the hands of school boards, and places it in those of the city councils. We think the change a bad one for the following reasons:

1. It is an abandonment of a time-honored policy respecting the management of schools. Our fathers deemed it wise to constitute an independent organization for the management of schools. In this view it is best to keep the schools from any entangling relations or alliances with other interests. Give councils the taxing power, and you at once sow the seeds of dissension and conflict.

2. School boards are responsible for the working of the schools, and they should be allowed the means of performing that duty. It is not certainly good policy to employ a man to do a piece of work and then to tie his hands behind his back. You can check and clog progress in this way, but you cannot promote the best interests of anything.

3. School boards are as likely to spend money judiciously as the city councils. Let the whole story of extravagance in cities be told, and we are much mistaken if the conclusion will not be reached that it would be more safe to compel city councils to go to school boards for money than the reverse.

4. The plan of the Commission has been in operation in Philadelphia, and the example is not in its favor. It has oftentimes crippled the work of the Board of Education without promoting economy. Indeed, the Commission, as if to defeat its own purpose, holds up the school expenditures of Philadelphia as a striking example of extravagance. After giving a statement of the increased expenses, they say "there is certainly nothing which compensates the city of Philadelphia for the enormous increase in the cost of education within the last twenty years." The city councils appropriated the money. We believe that if the full responsibility of levying and collecting the school taxes had rested with the Board of Education the expenses would have been less. We do not want the evil example of Philadelphia in this respect to be followed by the other cities of the State.

Sec. 12. All laws or parts of laws relating to common schools, and school property in the several cities of this Commonwealth, not supplied or modified by the provisions of this act, shall continue in force.

Thus ends the bill, prepared by the Municipal Commission, "after," as they say,

"much earnest and anxious consideration." As a whole we have no hesitation in expressing our opposition to it. Its passage would do little to improve and much to cripple our systems of public instruction. The several provisions of the bill were evidently written by men who have not had much to do with the practical management of school affairs. We hope other portions of their work show their law-making power to better advantage.

Directors' Column.

TAXPAYERS have the right to inquire into the management of schools, and we are glad to see them do it. We claim to be an economist. We do not believe in spending either our own or other people's money unless we receive in return the money's worth. Doubtless, in the flush times of past years, more money was now and then expended in building fine school-houses and equipping fine schools than was necessary; but we venture to assert that upon a careful examination it will be found that there has been vastly less extravagance on the part of school boards than among officials in any other department of the public service. We confess with shame, too, that the prevailing vice of the times, dishonesty, has crept here and there into boards of school directors; but their crimes of this kind are few in number and small in extent compared with those of other bodies intrusted with the expenditure of public funds. We are, however, for economy in all directions. Let the most searching examinations be made into the management of school affairs in high and low places, in city and country, and, if the public money has been anywhere misused, let the remedy be applied at once, and let punishment be meted out to the offenders, swift and sure.

Withal, the work of retrenchment ought not to be blind. Let nothing be struck down in pure wantonness. In some places, we notice, attacks have been commenced on graded and high schools. In others, threats are made against the superintendency. The normal schools come in on many hands for a share of abuse. Scarcely a teacher in the State seems likely to escape without having his salary, small as it often is, reduced. Now much of this promised work of destruction comes from the hands of men who know not what they do, who seem impelled to strike without considering what they may destroy. We wish to remind all concerned that true economy consists in spending money wisely as well as in saving it.

THE COUNTY SUPERINTENDENCY.

MESSRS. EDITORS:—In the December number of *The Journal*, I see a communication over the signature of "A Director," in which the writer speaks of the office of County Superintendent in language rather more emphatic than complimentary. He seems to think the office a nuisance, and that it should be abolished; that it was established merely for the purpose of making money, and that many of our teachers teach for the sake of the "almighty dollar," rather than for the benefit of their pupils. He also thinks that our schools might be engineered upon a cheaper plan, by having only three directors in each school district; let one be competent to examine teachers, and pay him a fair salary for time spent in examining teachers, visiting schools, etc.

Such a system might answer the purpose very well in many of the larger towns and cities, but I have been convinced, by experience, that in many of the smaller villages and rural districts the plan would prove superlatively futile. I am confident there are many districts in which there could not be found an individual capable of performing those duties, and in some instances, if such a person could be found and were willing to serve, a majority of the voters of the district would oppose his election. There are many districts in the state in which a majority of the voters do not very extensively appreciate the benefits of a thorough education, believing that ability to read, write, and cipher as far as the "Single Rule of Three," is all that is necessary for the laboring classes, and that more than this would only make rascals of them. What would "A Director" think of directors examining and passing upon the qualifications of teachers, when the criterion of those directors is, the higher the figures on the certificate the better the qualifications of the applicant? In such districts it is probable that many of the teachers employed would teach for the sake of the "almighty dollar," only, without imparting any significant amount of useful knowledge to the pupils.

I have known of directors who objected to paying for sawing and splitting kindling for the school-room, alleging that it was the duty of teachers to prepare the kindling, or

the boys might go to the woods and gather brush, as that was the way they did when they went to school. Surely "A Director" will see the necessity of the salutary supervision, advice and guidance of a County Superintendent in such cases.

Besides all this, I think we derive another great benefit from the office of County Superintendent. It serves to elevate the standard of qualifications of teachers, and creates a disposition and energy among the profession to study and improve. Abolish the office, and there will be many applicants for schools who would not apply under the present system, and if the judgment of their qualifications be submitted to the directors, I fear many incompetent ones will be appointed in preference to some of our best teachers.

ANOTHER DIRECTOR.

PENNSVILLE, PA., *Dec.* 6, 1877.

Editors School Journal:—In the December number of your *Journal*, I see, on page 223, an article written against the County Superintendency. I think the director who wrote it is rather radical in his views. I look upon this office as one of the most important in connection with our free school system. But I am willing to admit that it is not all it should be. We should not do away with the County Superintendency, but we should make the office more effective. The County Superintendents in most counties are entirely unable to do all the work that ought to be done. For example, they cannot visit the schools more than once in a term when it would be of great advantage to have them visited several times. The office of school director is a high one, higher than that of a County Superintendent, if he discharges his duties in the right spirit. Is there anything worthy of more praise than for a man to do his duty without pay or hope of reward of any kind. If we ever make the office of school director a paying one we will cripple the whole system. But important as the office of school director may be, school directors do not have that professional knowledge that is necessary to make their visits to the schools most profitable.

In my opinion, we must have as school visitors men who can teach school themselves, men who are qualified to instruct teachers, men who have a minute knowledge of the work of the school-room, intellectual and moral. Now, I propose that we continue the office of County Superintendent and give him power to appoint a sufficient number of competent assistants to visit all the schools of a county once a month. If the schools were open five months in the year, each might receive five visits. At the first visit, instruction could be given in the manner of teaching, and later visits would show whether the instructions were faithfully carried out. The office of assistant superintendent should be filled by an experienced teacher holding a Permanent Certificate, who should keep a record of each visit and send a monthly report to the County Superintendent. He should be paid by the school boards whose schools he visited, his wages not to exceed ten per centum above the salaries paid to the teachers of the districts. I am in favor of the present system if we cannot obtain a better one; but what I now propose would be a great improvement.

In conclusion, I would advise all superintendents to elevate the standard of teachers as fast as possible, dropping off the rolls without ceremony those who are in any way incompetent or wanting in devotion to their work. And I would advise school directors not to encourage changes, that would only make things worse.

JOHN G. WHITE, *School Director.*

Messrs. Editors: In a recent number of *The Journal* "A Director" favors the abolition of the County Superintendency, on the ground of its uselessness. "It is of no earthly use whatever," he says. The vehemence with which he declares that the office was created simply "because somebody wanted an easy position, with large salary, for doing nothing," precludes the possibility of suspecting that this "Director" may be influenced by similar motives, when, in the following language, he advocates the creation of a salaried office that might come within his reach: "Have only three school directors to each school district in the different counties of the State. Let one of them be competent to examine teachers for the different schools in his district, when State Normal graduates can not be had to fill them; let this director be paid a fair and honest compensation for the time he spends in examining teachers and visiting schools, for *you know 'the laborer is worthy of his hire.'*"

It would seem from this that the Superintendency is not so utterly useless after all, if from twenty to forty new salaried officers are to be created in its place.

One great evil of the present system is the lack of uniformity in the standard of qualifications of teachers. Each Superintendent has his own ideas about qualifications, making as many different standards as there are counties. The system proposed by this director would make as many as there are townships!

Another evil is, that examining officers find it difficult to maintain their own standard uniformity in cases where their feelings are appealed to personally in favor of an applicant for a certificate. The personal influences that would be exercised over the officers in the proposed system, would be greater in proportion, as they would be more intimately acquainted with the applicants and their friends.

He says it will cost less. Divide the salary of any Superintendent in the State into as many parts as there are districts in his county, and if this or any other *competent* "Director" is willing to perform the work required for less than one of the parts, I will yield him the point of cheapness; but the adoption of his plan would be a long step backward, and would drive us farther than ever from what the educational interests of the country sadly need, a

UNIFORM STANDARD.

Messrs. Editors:—Will you permit me, in a few words, to endorse the article on "Free Text-Books," from the pen of Hon. Edward Searing, of Wisconsin, in the December number of *The Journal.* To my mind it contains true logic, and speaks the language of positive conviction, pointing out the reason why so many children of poor and indigent parents do not attend our public schools. We have an illustration of this in our own district, where numbers of children are growing up without the advantages of

an education. The adoption of the "Free Text-Book" plan would certainly contribute much towards securing uniformity in our schools, and enabling directors to carry out successfully the suggestion in your editorial article on securing the attendance of "children not in school." In conclusion, I would urge upon all, directors, especially, to read and study the article on "Free Text-Books." DIRECTOR.

Industry, Beaver County.

OBITUARY.

WILLIAM HENRY, late County Superintendent of Montour county, was first elected May 1st, 1866. He was re-elected in 1869, 1872 and 1875, and served in the office till the time of his death, January 3d, 1878, a period of nearly twelve years. His sickness was consumption, from which he suffered more or less during the last few years. He leaves a widow with five small children. His age was forty-six years.

OFFICIAL DEPARTMENT.

DEPARTMENT PUBLIC INSTRUCTION,
HARRISBURG, February, 1878.

THE boxes containing the reports, teachers' report books and the annual supply of documents will be forwarded this year to the Superintendents of all the large counties in two sets. This is owing to the unusual size of the report, and the delay in getting it from the printers. The blank forms and documents for the personal use of the Superintendents will be found near the top of one of the boxes first forwarded. The first set of boxes will be shipped by Wm. B. Wilson, of Harrisburg, who will pay all expenses on them to the place of destination. The expenses will also be paid on the second set of boxes. A form of receipt will be sent by mail at about the same time with the boxes, which should be signed and returned as soon as the documents come to hand.

NORMAL SCHOOL CONFERENCE.

THE following circular letter was issued by the Superintendent of Public Instruction, dated January 4, 1878:

To Principals and Trustees of State Normal Schools.

GENTLEMEN: There are several questions concerning our Normal School policy which it is important to settle. I therefore invite a conference of the principals of the Normal Schools and of such representatives from boards of trustees as may be appointed, to meet at the rooms of the Department of Public Instruction, Harrisburg, on Tuesday, the 15th day of January, at two o'clock P. M. The session will probably continue during two days.

Among the questions to be considered by the conference as a whole, are the following:

1. How should appropriations, made by the State to the Normal Schools, be divided?
2. Shall further aid be asked of the present Legislature for the Normal Schools?
3. To what extent and in what respects should the State have control of the Normal Schools.
4. Should students longer be admitted to the Normal Schools who do not intend to become teachers?
5. What improvements should be made in the Model Schools?
6. What changes should be made in the laws relating to Normal Schools?

The principals of the schools will be invited to remain in session after the adjournment of the conference to consider—

1. The course of study for Normal Schools.
2. Measures for increasing the efficiency of the Normal Schools as training schools for teachers.
3. The relations of Normal Schools to one another.
4. The mode of examining the graduating classes of Normal Schools.
5. The propriety of granting to Normal Schools authority to examine and certificate teachers.

It is desirable on many accounts that all the schools shall be represented. The interests involved are too important to be neglected. The officers of the boards of trustees or the principals of the schools to whom this circular will be sent, should make arrangements at once to call special meetings of their boards, that representatives may be chosen.

J. P. WICKERSHAM,
Supt. Public Instruction.

Pursuant to the call of the Superintendent, the conference met at the time appointed in the rooms of the School Department, Jan. 15, 1878.

Judge Elwell, of Bloomsburg, was made chairman, and Prof. Raub, of Lock Haven, Secretary. The object of the meeting was stated by the Superintendent of Public Instruction, and the work of the conference mapped out as indicated in the circular.

The following Principals, Profs. Brooks, Schaeffer, Allen, Waller, Hays, Raub, Sensenig, Beard, and Cooper were present; also the following Trustees: Second District, Geo. K. Reed, Jacob M. Frantz and John M. Stehman, Esqs.; Third District, Rev. B. E. Kramlich, Hon. H. H. Schwartz, and Col. Thomas D. Fister; Fifth District, Dr. C. V. Elliott; Sixth District, Hon. Wm. Elwell, D. A. Beckley, Esq., C. W. Miller, Esq.; Seventh District, James E. McLean, Esq., and Maj. N. L. Dykeman; Eighth District, A. N. Raub; Ninth District, A. W. Wilson and A. H. Fulton, Esq.; Tenth District, Hons. Geo. V. Lawrence and J. K. Billingsley; Twelfth District, Hons. John Fertig and S. F. Chapin.

On motion, the first two questions, relating to the matter of appropriations, were discussed together, the members of the Legislature being invited to sit with the conference when possible.

After considerable discussion of a bill offered for consideration by Mr. McLean, the questions regarding appropriations were, on motion, referred to a committee consisting of a representative from each school as follows: Prof. Brooks, Mr. Swartz, Prof. Allen, Judge Elwell, Prof. Hays, Prof. Raub, A. W. Wilson, Prof. Beard and Prof. Cooper.

The questions of State Control, Admission of Pupils other than Teachers to the Normal Schools, Model School Management, and Normal School Laws, which had been submitted for discussion, were, on motion, allowed to remain as at present.

At 9 P. M. the committee on the appropriation bill made their report to the conference, recommending a bill asking for five hundred thousand dollars in five annual installments. The report as amended, was adopted in the following form, as a bill to be enacted:

Be it enacted, etc., That for the several State Normal Schools organized and accepted as such under the laws of this commonwealth, the sum of five hundred thousand dollars, be and the same is hereby specifically appropriated, to be paid in annual installments of one hundred thousand dollars each, beginning June, 1878, and continuing from year to year until 1882, to be distributed in accordance with the provisions of an act approved the twelfth day of April, Anno Domini one thousand eight hundred and seventy-five, except so far as the division of the money is concerned, which shall be in equal amounts among the several Normal Schools now recognized by the State: *Provided*, That before said money shall be paid, the trustees of said institutions shall cause a mortgage upon the grounds and buildings of the institutions for the amount hereby appropriated to be executed to the Commonwealth of Pennsylvania, creating a lien upon said property in favor of the Commonwealth.

The following committee: Prof. Allen, Prof. Hays, and Mr. Schwartz, was instructed to consult with the Committee on Appropriations of the House of Representatives, and lay the claims of Normal Schools before them. The committee was also instructed to have the bill presented and offered in the House, and urge its enactment.

MEETING OF PRINCIPALS.

Immediately after the adjournment of the general conference of representatives from the Normal Schools the Conference of Principals was organized by the election of Dr. Edward Brooks as chairman and Rev. N. C. Schaeffer as secretary. On motion, adjourned to meet at 9 o'clock on Wednesday.

MORNING SESSION.

The Conference was called to order by the president. The question of the propriety of granting to Normal Schools authority to examine and certificate teachers was discussed at length, and the principals were called upon to express their views in the order of the numbers of their districts. A committee of three, consisting of Professors Cooper, Maris and Raub, was appointed to frame a report on this point, and to see the State Superintendent in reference to the validity of the decision which subjects the holders of the Bachelor's diploma to examination by County Superintendents in case they fail to secure the Master's diploma at the expiration of the first two years after graduation.

The mode of examining the graduating classes was then taken up, and, on motion of Prof. Beard, it was agreed to endorse the past constitution of the Board of Examiners, and the combination of oral and written examinations, but to ask for longer time in which to conduct the examinations. The general feeling seemed to be in favor of having the written work done under the eye of a County Superintendent during several days immediately preceding the oral examination. On motion, the Conference adjourned until 2 o'clock.

AFTERNOON SESSION.

The relations of Normal Schools was the first topic of discussion in the afternoon. After mature deliberation, it was resolved that if a student be suspended, dishonorably dismissed or expelled by any Normal School, such student shall not be admitted into any other Normal School when informed, unless by permission of the school which administered the discipline.

On motion of Prof. Maris, it was agreed that it be considered discourteous to use the catalogue of another Normal School as a mailing list.

On motion of Prof. Allen, two courses were adopted in place of the three which are now found in the catalogues. From the clause allowing substitutions the word "lady" was dropped, thus allowing the same privileges to both sexes. Each principal was requested to forward to the department within three weeks a plan for arranging the courses of study in State Normal Schools. A committee of three (Professors Brooks, Schaeffer and Maris) was appointed to report a plan, based upon these suggestions, to be submitted in printed form to the Conference of Principals for final action. On motion, the Conference adjourned *sine die*.

EDWARD BROOKS, *Prest.*
N. C. SCHAEFFER, *Secy.*

PERMANENT CERTIFICATES GRANTED.

NO.	NAME.	RESIDENCE.
2030	R. H. Kelly.....	Pittsburgh, Pa.
2031	J. A. Biddle.	Williamsburg, Blair.
2032	A. C. Porter.....	Pit Hole City, Venango.
2033	P. J. Leitzell	Spring Mills, Centre.
2034	J. C. Weaver	Bellefonte, Centre.
2035	Henry E. Weirick ..	Rebersburg, Centre.
2036	S. K. Emerick.....	Centre Hall, Centre.
2037	Julia Wolf.....	Aaronsburg, Centre.
2038	Louisa L. Barnes....	Columbus, Warren.
2039	Anthony Groves.....	Brockwayville, Jefferson.
2040	Henry Hawk	Altoona, Blair.
2041	Lizzie Thompson...	Bennetts, Allegheny.
2042	Amanda Chamberl'n	Towanda, Bradford.
2043	A. S. Smith.....	New Lebanon, Mercer.
2044	L. E. Gennis.....	Acker, Perry.
2045	David Boyd.....	Duncannon, Perry.
2046	H. C. Gault.....	Newport, Perry.
2047	Wm. G. Ladds.....	Franklin, Venango.
2048	Mrs. Mary Paup.....	Lickingville, Clarion.
2049	Elizabeth Lyon.....	Pittsburgh, Pa.
2050	Hannah Houston...	" "
2051	Sallie N. Shoffner...	Norristown, Montgomery.
2052	W. H. Kain.	York, York.
2053	T. E. Wakeham.....	Sewickley, Allegheny.
2054	Cyrus Knecht.....	Easton, Northampton.
2055	Albert D. McIlhenny	Easton, Northampton.
2056	Thomas Farquhar...	Easton, Northampton.
2057	Ella Spalding.....	Towanda, Bradford.
2058	Mary J. Kennedy...	Oil City, Venango.
2059	Clara N. J. Cathers.	Oil City, Venango.
2060	B. F. L. Burkert....	Norristown, Montgomery.
2061	Lizzie E. Dewey....	Columbus, Warren.
2062	A. B. Miller.....	Warren, Warren.
2063	J. M. Yost..... ...	Elimsport, Lycoming.
2064	Miss. M. E. Stuck...	York, Pa.,
2065	Fred. W. Worley....	Harrisburg, Pa.
2066	G. P. Kelley.....	Pittston, Luzerne.
2067	C. L. Lose	Montoursville, Lycoming.
2068	Enos McDonald.....	Prospect, Butler.
2069	D. F. McKee.....	Baldwin, Butler.
2070	J. H. Murtland.....	Peachville, Butler.
2071	Thos. D. McCreary.	New Chester, Adams.
2072	E. Carrie Grove.....	Genesee Forks, Potter.
2073	W. R. Bemaly.....	Cochran's Mills, Armst'g.
2074	Miss G. C. Opp.....	Muncy, Lycoming.
2075	Jennie H. Gibson..	Kittanning, Armstrong.

MUSICAL EXPRESSION.—The imagination wakened brings its own language, and that is always musical. It may or may not have rhyme, or a fixed metre, but it will always have its special music or tone. Great thoughts insure musical expression, whatever language the bard uses; the secret of tone is at the heart of the poem. Every great master is such by this power—Chaucer, and Shakspeare, and Raleigh, and Milton, and Collins, and Burns, and Byron, and Tennyson, and Wolfe. The true inspiration always brings it. Perhaps it cannot be analyzed; but we all yield to it. It is the life of the good ballads; it is in the German hymns which Wesley translated; it is in the 'Marseillaise' of Rouget de Lisle; it gave their value to the chants of the old Romish and of the English church; and it is the only account we can give of their wonderful power on the people. Poems may please by their talent and ingenuity, or the music of their rhythm, but when they charm us it is because they have this quality, for this is the union of nature with thought.—*Emerson.*

SING ALWAYS.

FROM "THE CHIMES."

1. Sing with a tune-ful spir-it, Sing with a cheer-ful lay,
2. Sing when the heart is trou-bled, Sing when the hours are long,
3. Sing in the vale of shad-ows, Sing in the hour of death,

Praise to the great Cre-a-tor, While on thy pil-grim way.
Sing when the storm-cloud gath-ers, Sweet is the voice of song.
And when thy hours are clos-ing, Sing with thy lat-est breath.

Sing when the birds are wak-ing, Sing with the morn-ing light,
Sing when the sky is dark-est, Sing when the thun-ders roll,
Sing till the heart's deep long-ings Cease on the oth-er shore;

Sing in the noon-tide's gold-en beams, Sing in the hush of night.
Sing of a land where rest re-mains, Rest for the wea-ry soul.
Then, with the count-less num-bers there, Sing on for ev-er-more.

TERMS.—Rhythmics is from a Greek word, signifying "to flow"—measured movement. Melodics, from a Greek word signifying "a song or poem"—a tune. Dynamics, from a Greek word, signifying "to be able"—power. The plural form of each of these words is taken as the name of a department, because, as technical terms, they comprehend everything that arises out of the properties of which they treat. Thus, Rhythmics comprehends all rhythmic things, or whatever may be derived from the primary fact, that tones may be long or short, or that length is a property of tones, including also rhythms, or the structure of phrases, sections and periods. Again, the term Melodics includes everything that may proceed from the primary distinction of low or high, or from the property of pitch; the word melody, in its common use, is much more limited, and refers only to a pleasing succession of tones in rhythmic order, or to an ordinary tune form. Dynamics also embraces not only the mere force of tones, but also their manner or form of delivery.

THE
SCHOOL JOURNAL
ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

Vol. 26. MARCH, 1878. No. 9.

FACTS CONCERNING EDUCATION IN EUROPE.

PEDAGOGICS ABROAD.—V.

LONG before provision began to be made for the education of the common people, institutions for higher instruction were established in Europe. Many of them were founded by the Church for ecclesiastical purposes, and others owe their existence to the munificence of kings, nobles and wealthy private individuals, whose main object was to strengthen the ruling class by educating the few. The broad doctrine that education is for all, high and low, rich and poor, is an outgrowth of the liberal spirit of the nineteenth century.

All the leading countries of Europe are now well supplied with normal schools or teachers' seminaries, and in some of them no one is allowed to teach who is not a graduate of one of these institutions, or who has not received professional instruction equivalent to that embraced in their courses of study. In many countries teachers are not allowed, while employed as such, to engage in any other kind of business.

Teachers in Europe are not nearly as well paid as in the United States, but the cost of living is generally much less; $200 a year is as much as is paid on an average to the teachers of elementary schools. But few female teachers are employed, and, when employed, their salaries are less than those of male teachers. $1000 a year is a high salary for a teacher in a secondary school, and a professor in a university seldom receives more than $2000. The salaries of teachers, however, are sometimes augmented by the provision made for a house, garden, fuel, etc.

Teachers are pensioned in all countries of Europe. Sometimes the pensions are paid out of a fund accumulated from annual contributions made to it by themselves, and sometimes they are paid wholly or in part by the respective governments. The amount of the pension is in some instances equal to the full salary, and in others one-half or one-third of that amount. It is always given after faithful service for a certain number of years, 30, 40, 50; and in some countries all their sick or broken-down teachers are permitted to retire on a pension before serving the full time.

Religion as a branch of study is taught in almost all the schools of every part of Europe. Sometimes, it is taught by the teachers; but in many places, where the children of different denominations attend the same school, it is taught by the clergymen of the respective denominations. It is not uncommon in certain districts to see at the same school, in the same day, and at the same hour of the day, engaged in teaching, a Catholic priest, a Protestant clergyman, and a Jewish rabbi. All clashing is avoided

by allowing each to instruct only those who desire to receive his instructions. In this way the deep conviction that the young need instruction in religion is satisfied, and the interests of the different denominations are harmonized.

In Norway, Sweden, Finland, Denmark, Holland and other countries of northern Europe, there still exist "ambulatory" schools, or schools in which the teacher goes from house to house and gives instruction. As the country becomes more thickly settled, this method of teaching gradually disappears, but it is still the only method practicable in some districts where the houses are found only at the distance of miles apart. The clergymen in such countries frequently perform both the duties of pastor and schoolmaster. This statement throws light upon a fact in our own state history, namely, that the Dutch and Swedish settlers along the Delaware, before the coming of Penn, had no school-houses, although they are known to have attended in some degree to the matter of education. Considering the custom that existed in their own countries, then and now, it seems clear that instruction was given in the families of the settlers, and probably by the ministers.

Public schools were established in Holland as early as the twelfth century, and systems of public schools, more or less developed, existed in that country at the time the Pilgrim Fathers took refuge there and at the time William Penn traveled through the country. Possibly both obtained their ideas about education from the Dutch. To admit it may be to destroy certain idols, but the truth is what we want these days. One thing is certain, the school system of Pennsylvania is not an importation from New England or New York, but it is an outgrowth of ideas contained in Penn's Frame of Government, whether he obtained them in Holland, or in England, or whether they were original to his own mind.

Education is compulsory in most of the countries of Europe; but this is not the case in the Netherlands, and yet the school attendance is quite as regular and the people are as generally educated as in any other country in Europe. Hear the reason as stated by one who knows: "The higher school authorities have so excited the zeal of the district and communal boards, and have been so well seconded in their efforts by the clergy, that the necessity for compulsory regulations has not been felt." By the "higher school authorities" is meant the school inspectors or superintendents of schools, and the "district and communal boards" are the local boards that have charge of the schools, very nearly the same as our boards of school directors. Need the moral be drawn?

The Netherlands have probably the most complete system of school inspection in Europe. The area of the country is 13,464 square miles, and the population is about 3,674,462. The territory, which is about one-fourth as large as Pennsylvania, is divided into eleven Provinces and ninety-four School Districts. There is at the head of the schools a Superintendent of Public Instruction, and he has an assistant in each Province and a School Inspector in each School District, making one hundred and ten in all. These officers are appointed during good behavior, and must be specially fitted for this work.

To show how thoroughly this work can be done, we will state that there were in the Netherlands in 1873, 3,790 schools, 500,059 people, and 11,465 teachers. Dividing the whole equally among the several Inspectors, we find that each Provincial Inspector would have under his control, in a jurisdiction of 1,224 square miles, containing 334,128 pupils, 344 schools with 45,460 pupils and 1,642 teachers; and that each School District Inspector would have to supervise in a jurisdiction of 143 square miles, containing a population of 39,089, only 40 schools, with 5,319 pupils and 122 teachers. From this statement it is easy to see how the "zeal of the local boards" can be excited by "the higher authorities." The Netherlands owes her good schools to her admirable system of inspection.

MORAL TRAINING IN THE PUBLIC SCHOOLS.

WM. MUELLER.

I HAD the pleasure recently of listening to a very animated controversy regarding the relations of state and school, the limits of popular education, and similar topics. In the course of the debate a gentleman indirectly preferred a charge against the public schools by asking the following question: "What is the reason that our schools do not bring forth Washingtons, Jeffersons, and Hamiltons?" It occurred

to me then, that he might have been well answered by relating an incident which took place when Madame de Stael visited Goethe's mother in Frankfort, On entering the reception room, the old lady bowed courteously, but did not advance to receive the minister's daughter. "Madame," said the latter in a somewhat offended tone, "I am the authoress of Corinne!" "And I, Madame," replied the old lady quietly, "am the *mother of Goethe.*" It is the *mother's* influence more than anything else, that shapes the future hero, statesman, and poet; and the family circle is the place where the foundation of those leanings and habits is laid, which afterward tend to form men of extraordinary character. The schools cannot be expected to produce Washingtons and Jeffersons, but it is within their province to aid fathers and mothers in the bringing up of good men. As the deficiency of our system in this respect cannot be denied, the gentleman's insinuation contained a bitter truth, and convinced me, as have many similar remarks which I have heard since, that not only schoolmen, but also observing parents, begin to awaken to the danger of our exclusively intellectual education, and to realize the necessity of specific moral training.

Hence the question arises: Can the school aid in the moral development of the children without giving specific religious instruction, and what means are at its command for the production of satisfactory results? To the first part of this question I shall not reply directly, but hope to dispose of it by answering the second.

The most general requisite for the realization of the educational aim of the schools, and for a rational solution of this problem, is the training of a class of teachers, who shall have acquired not only the necessary scholastic culture, but shall possess also a clear understanding of the philosophy of teaching; who shall be capable of maintaining discipline upon the principles of that science; who shall show facility in the application of the most advanced methods of imparting knowledge, and be, at the same time, under the control of an administrative body having the ability to direct the distribution of the teaching force in such a manner as will best accomplish the ends of a correct educational system.

This comprehends a more thorough professional education of the teachers than we have at present. The thousands of young women and men, who make the schoolroom the sphere of their activity without a previous technical preparation, may—after having experimented for several years at the expense of the pupils—acquire a kind of business routine by means of which they will produce fair results; but the knowledge of the pupils will be rather the precipitation of a filtering process than the outgrowth of a gradual mental development. The consequences of this lack of professional training are still more serious when viewed in regard to the influence exerted by the teacher upon the formation of the pupil's character. All activity in this direction should be based upon a close observation of the child's individuality. The nature of the physical processes, resulting from the employment of certain measures, must be examined and the future treatment of the pupil regulated accordingly—operations certainly necessitating a complete knowledge of the subjects to which they are to be applied, the matter to be taught and the manner of teaching it.

The second means for the attainment of the object under consideration is of a negative character, and consists of the abandonment of a system resorted to for the maintenance of discipline in several cities, and prevailing in our country schools to a great extent. The most characteristic feature of this system is, that the teachers and pupils come to an agreement resembling a bargain between two trading parties. Every mental exertion and moral action, every neglect of duty and violation of law on the part of the pupil, is taxed; and an immediate reward or or punishment, in the form of a merit or demerit, attached to it. The girl, who has studied her lesson well, is in the register credited with a merit; while the boy, who has talked, is charged with a demerit; at the end of the week or quarter the teacher adds the minus and the plus quantities, draws the balance, and presents the intellectual and moral results of her work in attractive figures to the respective authorities, who regulate the advancement of the pupils accordingly. It is marvelous that a proceeding so entirely unjust and utterly dangerous could be tolerated by a thinking community.

It is obvious that the distinctions of mental excellence fall to the share of those children possessing superior talents, or enjoying the privilege of a better home education; while the less gifted and poorer are held responsible for their deficiency in natural endowments and unfavorable circumstances of life,—and if they cannot comprehend anything else, they are certain to realize

that this treatment is neither reasonable nor just. Again, a child who finds himself rewarded when he prepares his lesson, or when he behaves well for an hour, and thus continuously through the whole of his school-life, must necessarily arrive at the conclusion that any exertion on his part without the prospect of remuneration, is simple folly; that it is not so much the acquisition of knowledge and his improvement that are desired, but a high percentage from the summed-up merits at the end of the year; and this circumstance leads to a total perversion of the child's moral sentiments. The fundamental principle of ethics, that the consciousness of having performed a duty is the highest and purest reward for virtue, should be made the basis of school government. The pupil, conforming to the rules of discipline and studying his lessons faithfully, does nothing more than his duty; he simply comes up to his obligations towards his parents, his teachers, and himself. Persons who have not observed the character of children, are inclined to believe in the necessity of stimu lating means; it is, however, much easier to develop in the mind of the young the consciousness of duty, than to lead them to comprehend the working of such a complicated contrivance as the merit system. Every child has a strong inclination to activity; satisfy it by the proper amount of work exactly adapted to the stage of its development, assist him in the performance of it, and the gratification resulting from having mastered his task will prove a proper recompense, while the expression of satisfaction on the part of his parents and teachers, judiciously and economically employed, will be a sufficient external stimulant.

Lastly, I come to the consideration of the positive means to be applied in the moral education of children.

The most fundamental measure to be employed by the family as well as by the school, appears to be the *restriction* of the *lower* and the *development* of the *higher* impulses of the child's nature. In many cases the father or the teacher has the power to transform an animal inclination into an intellectual one by simply directing it into the proper channel. There is, for instance, nothing bad in the little child's desire for sweetmeets, if it be only confined within proper limits; but as he grows older, an attempt should be made to create within him a higher motive than the mere animal gratification of his appetite. He may be induced to share such luxuries with his playmates, and thus feel the satisfaction invariably accompanying the subordination of a lower inclination to a higher one, and the pure joy resulting from the consciousness of having having done good unto others. When the child sacrifices a sensual pleasure for the first time with the view of obeying a higher impulse of his being, he will do so unwillingly, and often with great reluctance; but in the same ratio in which the dim feeling of having done something good ripens into a clear perception of the value of a moral act, his capability of controlling lower propensities increases, and finally he subordinates them to ethic motives without any great exertion—the *frequent repetition of the act having led to the formation of a correct habit.* Thus the teacher may successfully attempt to lay the foundation of habits of order, cleanliness, industry, and the virtues of obedience, self-denial, and sympathy with others. Sometimes it may be found advisable to tolerate a lower instinct until we are capable of replacing it by a higher. Thus if vanity were the sole motive for diligence on the part of the child, it shou'd not be distroyed, unless he could be induced to exert his energies by means of something nobler and purer.

By applying to those manifestations of the lower instincts of childhood, the same criterion by which they judge the actions of grown persons, parents and teachers are frequently led into gross error in the treatment of the young. Thus it would be extremely dangerous to call a boy a liar because he tells an untruth, or a thief because he steals a few apples; aside from the fact that his sensual instincts are strong, while his moral feelings are yet weak and indistinct, he does not realize the odium of these attributes as an adult does, but is inclined to regard them as the expression of a personal emnity towards him. Equally dangerous is the application of sarcasm, frequently resorted to in our schools, and when the pupils are of tender age. A sarcastic remark directed towards a grown person often proves an effectual appeal to his better self and acts as a valuable stimulant; but the child, in most cases, has neither the ripeness of intellect necessary to regard such remarks as prompted by the educator's sympathy with his imperfections, nor sufficient strength of character to yield to such an appeal; hence he is inclined to look upon sarcasm as the expression of personal malice, and resents it with bitter hatred; and in-

stead of furthering the ends of education, such a weapon tends to paralyze the child's moral nature and to weaken the authority of the educator.

I come now to that part of moral training which seems to depend directly upon instruction. In reference to the methods to be employed there are two theories, the advocates of one attributing the greatest influence to the teaching of formulated principles, those of the other denouncing such a proceeding as utterly irrational and useless. The communication of moral axioms or fixed rules during the time spent in the common schools, would be decidedly erroneous; while, on the other hand, never, even at a later period of school-life, to aim at the establishment of general ethical ideas would hardly be less pardonable. Hence the predominance of the one over the other of these methods is simply a question of time.

The principles upon which the elementary instruction in all other branches should be based, hold good during the earlier stages of moral training. As the pupil, after having solved a series of problems of a similar character and after having realized the arithmetical process involved in them, will, without any difficulty, embody the result of his experience in a general formula; and as, from several examples which he has been induced to furnish, he will deduce a grammatical rule from his own language; likewise may he after the consideration of a concrete case, arrive at the abstract moral truth involved in it; he will be personally conscious of it, and the expression tends chiefly to fix it in a definite form in the mind. A moral system is the abstract of our moral experiences and cognitions, bearing the same relation to morality that grammar—the abstract of the laws of language—entertains to speech.

To begin moral training by giving the child principles in the form of commandments, rules, and proverbs, would be almost as unreasonable as the attempt to teach grammar before the child can speak. And to expect from the memorizing of those moral axioms and their daily recital any tangible result, to believe that a man, just about to slander his neighbor, will recall "Axiom I." of the moral alphabet, will recite it thus: "A good name is rather to be chosen than great riches," and then abandon his bad intention, is a supposition entirely at variance with the nature of the psychical process in such a case and the evidence of experience. If we aim at the imparting of cognitions, we must start from the consideration of particular instances, which will inevitably lead to the deduction of general principles. The chief object in view, however, is not so much the acquisition of ideas as the development of emotions and inclinations in the child, which recurring and being exercised repeatedly, will increase in strength and furnish the elements constituting the character of the man. The school should endeavor to kindle love and enthusiasm for the good, and to create antipathy and hatred for the bad. These sentiments may be developed in the most natural manner and increased in strength most effectively, in connection with incidents occurring in the daily life of children.

A boy has wantonly tormented an animal; his playmates have witnessed the cruelty; such conduct affords an excellent opportunity for showing the contemptible features of the deed in the strongest light, to arouse the indignation of the school at so cowardly a proceeding, and to create a deep and lasting moral impression. A girl has given a part of her cake to a poor child; the teacher presents the circumstance in a simple but animated manner, dwelling especially upon the fact that a benevolent act has been performed by *one* of the *pupils;* if he possesses any warmth of feeling and enthusiasm for virtue, he will certainly inspire similar emotions in the breasts of his hearers. Two great teachers of mankind, Christ and Socrates, always proceeded in this manner, never delivering moral lectures and giving abstract rules, but urging upon their disciples the necessity of virtue with irresistible power, by referring to the familiar occurrences of every-day life.

Next to the incidents of their own lives, nothing exerts a more powerful influence upon the minds of children than the relation of the experience of others. Childhood is the epic age of man—the first sight of a certain phenomenon, the acquaintance of a new friend, each circumstance of this stage of life, is wrought by the imagination of the child into a complete story, the hero of which is himself, and which is communicated by him in this form to his adult friends. Hence if we desire a truth to be deeply rooted in the child's mind, we should not ignore these facts by delivering a long and solemn sermon, or by attempting to reason on the soundness of a moral question, but present them in that form which is best adapted to his nature and stage

of development—the narrative. Educators may select from holy and profane history stories, fables, and poems, involving moral principles, and either read or relate them to their pupils in an animated manner, or present suitable abstracts of the lives of great men and women. The intensity of effect depends upon the simplicity and conciseness of the story, the energy and warmth of the narration, and the degree of conviction with which the teacher dwells upon the moral point.

Regarding the compilations furnishing the material for the purpose under consideration, we confess that there is a great abundance of what is valueless and impracticable, and a great scarcity of books. Most authors of our school readers and juvenile works think it is necessary to affect an artificial childishness, degenerating into silliness, in order to be understood; or they go to the other extreme, introducing learned discourses on ethics, or bold metaphysical speculations. Another objection is the great length of most productions in this field of literature; thus we find, for instance, in a given reader, the healthy moral embodied in the story of Washington's hatchet, deprived of its force by diluting it until it becomes a lengthy dialogue, in the verbosity of which all the spirit is entirely lost. The authors of the Rollo's and Ralph's series make it their business to haunt a simple truth through thirty tedious chapters; burden it with such a weight of ornamental bywork that, at the end of the book, the lifelike truth has dwindled down to a hollow-eyed spectre, which can only excite pity or provoke disgust, but never arouse veneration or kindle enthusiasm. When Christ desired to present, in a form adapted to the intellect of his hearers, the dangers resulting from the possession of riches, he said, "It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God;" when he intended to urge upon their minds the necessity of a thorongh reform, he made use of the parable of putting new cloth upon old garments and filling old bottles with new wine; and when the disciples of Socrates expressed their indignation at the rudeness of a rich man, who did not return the salute of their master, the philosopher remaked: "You would not be angry if an uglier man than I passed by; why should you become indignant if a more impolite man than I do so?" The examples of these greatest educators should not be ignored, and every parent and teacher wishing to impress the mind of the youth strongly, should remember that brevity and simplicity are indispensable conditions of a satisfactory result.

Lastly, the common school has the power, and with it rests the obligation, to lay the foundation of those virtues upon which the future existence of this country will depend, patriotism, honesty, strong public sentiment, toleration, etc., by making the young acquainted with the founders of this republic, its great men, and the most glorious incidents of its history. Regarding the importance of this subject, Dr. Mayo remarked before the State Convention of Teachers, at Trenton:

> The time has come when the history of the American people should be one of the indispensable studies in every common school. It should begin in the primary grade, with familiar stories told by the teacher, illustrated by pictures and such objects of local and antiquarian interest as the neighborhood affords. It should be linked with the geography lesson, at every point, that the child may realize the growth of every portion of the country.

When attending a common school in Germany, I had a reader containing various selections, which, with the comments of the teacher, produced impressions upon my mind that have never been effaced. Some of them referred to incidents of Franklin's early life; one showed how Fulton, by perseverance, overcame the prejudice of his fellow men, and all other obstacles and difficulties placed in his way; and another related how Benjamin Thompson, moved by sympathy with the poorer classes, was led to establish soup houses at Munich.

It is not difficult to point out the reason which prompted the author in making the selections referred to. Being an excellent school man, and knowing thoroughly the nature of the child, he was aware that Franklin, Fulton and Thompson were representatives of purely human virtues; that their noble intentions, the mode in which the latter were realized, and their stage of action, could be comprehended and appreciated by any child.

Summing up my remarks on the topic, it appears that the following means would aid essentially in the moral education of youth:

1. The training of a class of teachers fitted by a more thorough professional culture for the *educational* aim of their vocation.

2. The abandonment of the merit and demerit system, and the establishment of rational discipline in accordance with the scientific principles of pedagogics.

3. A systematic plan for operation, aiming at the development of the higher and the restriction of the

lower impulses, and endeavoring to kindle enthusiasm for the good and antipathy towards the bad in children, by presenting to them models of virtue capable of being appreciated and imitated by them.

Lastly, the confirmation of all educational tendencies on the part of the teacher by the example of his own life.

It has been said that it was the Prussian schoolmaster who won the great battles of the Franco-German war. If the educators of this country will devote the same energy to the moral, which they bestow upon the intellectual, improvement of their pupils, then the problem of true reform may be brought near its solution, not so much by administrative changes in the political arena as by a process of purification and regeneration in the quiet sphere of the school-room; and then the American Schoolmaster may claim his share in victories much purer in nature and infinitely more momentous in their consequences than Gravelotte and Sedan, victories which tend to prove to the world that the era of brute force begins to vanish and that of reason to dawn; that the highest good of our modern civilization—a free government—is not only applicable in a small union of agricultural colonies, but forms also the surest basis for the complete development of a great and powerful people in the fields of industry, commerce, science and art. *New Education.*

SCHOOL VENTILATION.

AMOS ROW.

IT is well known that pure air is as essential to the maintenance of a healthy condition of body and mind as good nutritious food. Many of the diseases of children, and bodily ailments which are developed in after life, have their origin in breathing vitiated air in badly-ventilated rooms and crowded school-houses. The breathing of bad air produces impure blood, an unhealthy condition of brain; hence a disordered nervous system—the fruitful source of many ills.

There is something insidious in the manner in which impure air increases, as well as in its effects upon persons confined in rooms. Teachers who know this fact full well, both by theory and by experience, are nevertheless frequently found laboring in schools, unconscious of the bad condition of the air they breathe. In visiting schools, how often has this been found to be the case.

All who have had experience in this matter know exactly how it is brought about. The teacher commences the exercises when the air in the room is comparatively good, but by degrees he becomes so absorbed in his duties that he fails to be sensible of the rapidly increasing impurity of the air, and only recess or adjournment brings about the much needed change. And, although this has been the general experience for many years, it is strange that so vitally important a matter has received so little attention in the construction of the modern school-house—especially in rural districts.

When the weather is mild, and the atmosphere dry, the probability of children being injuriously affected by opening the door or windows, during school hours, for ventilation, is not so great; but under any other conditions of the atmosphere, it is frequently the direct cause of serious results to the children. It is well known that a small current or draft of air, but for a short time, upon a portion of the body, is sure to produce a disturbance in the circulation—often causing chills, colds, neuralgia, and kindred pains. And yet, pure air must be admitted in some way or other, in order to escape on the other hand the injurious effects of the contaminated air within.

Sometimes it happens that the floor is in a bad condition—full of holes; and this is regarded by some to be a sufficient means of supplying fresh air, when in fact it is the very reverse. It causes not only cold feet—one of the most prolific causes of disease, but the place from which the air is supplied is the very nest where foul air is generated, and especially is this the case when rotten wood or other decaying materials are below the floor, and the walls are closed with mortar or by banking.

Another mistake is often made in supposing that all cold air is necessarily pure, and on the other hand that all heated or warm air is necessarily impure. Heat and cold have, of themselves, nothing to do with the purity or the impurity of the atmosphere. What is really essential, is to obtain a sufficient amount of air containing the requisite percentage of oxygen, and having the right temperature and moisture. With certain modifications, this is the normal condition of the atmosphere.

It is believed that, to some extent, it is possible to secure these conditions of the air, even in school rooms, and that without great difficulty or involving great expense.

With this object in view, a plan was

adopted which has given unusually good satisfaction during more than a year's trial.

In order to insure success, it is necessary that the walls below the floor be compact and tight, with two small openings, on opposite sides, to be used, when necessary, for airing the space below the floor. The floor should be double. The windows and door must be well fitted, and the walls well built and free from all cracks or openings. The ceiling should be at least twelve feet from the floor. This will make a comfortable and warm room. In the west or northwest side of the wall, below the floor, an air-tight tube should be placed, three inches square in the clear, and reaching from the outside of the wall to a point directly under the stove. This requires the tube to have a right angle at a point where it is to reach the stove. Both ends of the tube are capped with perforated sheet iron, and firmly secured so that the caps cannot be easily removed. The end under the stove must be closely fitted into the floor, and nearly flush with it. Over this end a common register is placed, which should be surrounded with an iron guard or box, to prevent anything being thrown upon it.

A flue, extending a little below the ceiling and reaching beyond the roof, should be placed as far as possible from the seats of the pupils and teacher. In the side of this flue a register is placed, which can readily be opened or closed by means of a cord and pulley.

The practical points presented in this arrangement are:

1. That it is easily constructed, and costs but a trifle.

2. It introduces the air from without at a point where no one is injuriously affected by it.

3. The cold air, coming directly in contact with the heated stove, is partly warmed before being diffused through the room.

4. By opening the register in the flue above, the heated impure air immediately escapes and makes room for the admission of pure air from without.

5. This circulation will prevent foul air from accumulating on the floor, and the foul air under the the floor, if there be any, is effectually cut off.

This plan, in the main, was submitted to several boards of directors, and adopted by them in the erection of two school-houses in Buchanan county, Iowa.

Subsequently, inquiry was made of Wm. Miller, esq., an experienced teacher and a well-known citizen, who had charge of the school in the same vicinity before and after the erection of the new school-house, as to the merits of the plan; and he unhesitatingly gave it as his opinion, after trying it for one winter, that "he never saw any thing in the way of ventilators that gave such complete satisfaction." He said "he did not experience a single heavy or *dull time* with his pupils all winter," and that "the air in the room was always in good condition." A similar report was obtained from the school-house erected in the northern part of the county.

Little need be said as to the manner of using this arrangement. All school-rooms should be well ventilated morning, noon and evening. As soon as the room has been sufficiently warmed in the morning, let the register under the stove be opened, and be kept open, if necessary, during the hours of school. In case there is too much heated air, let the register above be opened a few minutes, and the heated air will pass off rapidly.

The teacher should be furnished with a good thermometer by which to regulate the temperature of the room, and also be provided with a suitable vessel in which to keep water constantly on the stove. With these appliances in the hands of the intelligent and interested teacher, it is thought, there need be no lack of good air in the school-room.

Postville, Iowa.

THE TEACHING OF SPELLING.

R. R. COCHRANE.

THE deficiencies of our alphabet, on the one hand, and the structure of our language, on the other, have given rise to anomalies that encompass the subject of English spelling with many perplexities and irregularities. It is these anomalies that render spelling one of the most difficult branches of public school education. To rid the language of all anomalies many eminent English educationists have, during the present year, proposed to reform the spelling of English words. The advocates of this reform propose to sweep away the present system of orthography, and replace it by a system subject to none of its irregularities, and consequently less difficult to beginners. Such a change is open to serious objections. The history and ancient associations preserved in the present spelling of most words would vanish with any change of orthography. "There is scarcely a letter of any English word but has its history; not a syllable about which an essay might not be written; not a word but has its roots far, far back in the dead generations; not one but is dear to the hundred millions who speak our tongue."

Any attempt to change the present system of English orthography because boys and girls find it difficult to learn to spell, would involve the historical study of words in many additional perplexities, and rob the study of English of its chief charm. But we do not require reform in our present system of spelling, so much as reform in our method of teaching it. We

are called upon to teach the form of words spelt, not according to the reform principle, but according to the usages which have been gradually developing the orthography of our language for hundreds of years past. We deal with words, not as they should be split, but as they are spelt, We should recognize the fact that our system of teaching spelling should be complementary to our method of teaching reading, and that a change in the latter necessitates a change in the former. It is the aim of the present paper to present a rational system of teaching this most important subject.

The art of spelling may be acquired either through the sense of hearing or through that of sight. There are, then, two methods of teaching spelling, and the principles upon which each is based demand examination at the outset. When spelling is made to depend upon the sense of hearing, the letters are said to be associated with the sounds in such a manner that the pronunciation of the sounds recalls the letters which represent them. This method is thus founded upon an analysis of sound. If the English language was strictly phonetic, this method would have advantages over any other, for spelling would then consist in the analysis of words in their simple sounds and the representation of these sounds by their appropriate letters. But the English language does not conform to phonetic principles. With words of the simplest orthography, an analysis of their sound never gives the names of the letters. The number of words containing silent letters is very great, while in the terminations *able* and *ible*, *ant* and *ent*, *or* and *er*, the sound gives us no assistance, and besides, the character of the vowel sounds is utterly uncertain and arbitrary. Hence to acquire a correct knowledge of English spelling it is almost necessary to form a personal acquaintance with each individual word. From the nature of our language it is certain, therefore, that the ear is no guide to the correct spelling of English words.

There are other reasons, not based upon the nature of our language, which should lead us to discontinue teaching exclusively by oral spelling. First, we cannot be certain that we have the undivided attention of the whole class. We can give active employment to only one pupil at the same time, and the rest may be attentive, or their thoughts may be wandering off in other directions. This method fosters inattention and listlessness, and should therefore not be adopted. Secondly, as each pupil can receive only a small portion of the words of the lesson, we cannot determine exactly whether the lesson has been prepared as a whole, nor can we determine with certainty all the mistakes of each pupil—a very important point in spelling—so that the value of the lesson to the class is very much diminished. Thirdly, by teaching spelling orally we adopt a method of little practical importance to the pupils after their school days are over. Few require to spell orally more than an occasional word in actual business, so that pupils trained to spell exclusively by the method of oral spelling have no preparation for the only use to which their knowledge of orthography will be put when they leave school. For these reasons, then, oral spelling should hold only a subordinate place in school work.

When spelling is made to depend upon the sense of sight we resolve the word into its several parts, and express these parts. This method is founded upon an analysis of *form*, and the important point aimed at is to impress the form of the word upon the memory of the pupils. No attention is paid at all to the sounds of the letters composing it. The word is viewed as the picture of an idea, and its parts are studied by the pupils so that they may be able to reproduce it in writing. The pupils are taught to look upon letters as parts of whole words, and not as characters representing certain sounds. The eye is trained in analyzing the forms and letter-contents of words, and the hand is trained to produce them promptly and correctly. This method appears to be the more rational one. From the commencement the pupils have abundant practice in writing words; each pupil spells from forty to fifty times as many words as he would by the oral system, and at the same time by having something allotted to him to do, he is prevented from being inattentive, listless, or mischievous. That better results will follow if spelling be taught from the beginning principally by written exercises, experience has fully convinced me. It is true that this system requires better teaching and far more labor than the oral system; but the best results, and not the minimum of labor to the teacher, should be the aim. The course of instruction to be pursued in each class will first be pointed out in the following paragraphs, after which the method of examing and correcting errors will be discussed.

While the pupil is in the first part of the First Reader, he should not be bothered with spelling at all. He is now so fully occupied in learning to read, that the introduction of spelling lessons at this stage only interferes with his progress. He requires time to gain such familiarity with the forms of words as will enable him to pronounce them with facility, and as the analysis of words, with a view to secure their correct spelling, can be of no use to him in acquiring their pronunciation, it should not be attempted. Words must be recognized as wholes before attempt is made to resolve them into their letter-contents, and hence spelling should follow reading. But if, after a few lessons have been read, the pupil be provided with slate and pencil, and be taught to print by copying from the black-board the simplest words of the lessons he can already read thoroughly, better results will follow. The exercise furnishes him with agreeable employment at a time when he would take very little interest in his book, and he performs the task willingly. He is led to observe more closely the forms of words by printing them again and again, and at the same time to institute for himself a comparison of words; so that when he finishes the reader he can not only spell all the words in it, but has gained a power of spelling. At this stage spelling is best taught when not taught formally.

When the pupil is promoted to Part Second he should take a step in advance. Hitherto we have helped him to the spelling of each word; we have shown him on the board how to print every word before asking him to print it; we have resolved every word for him into its letter-contents before requiring him to do the same. He has hitherto been dealing with *single* words, selected for him on account of their simplicity. We now withdraw this help and require him to analyze for himself every word he meets with in his future lessons. This step is for him a difficult one. He meets with many combinations of letters new and strange to him, as well as longer and more difficult words than before, while he has now to copy from the printed pages, of itself a difficult task for him. But we have placed him in the most favorable circumstances to accomplish the task. The work of copying from the board the words of his previous lessons has enabled him to master the mechanica

difficulties of forming the letters, so that he can now print with ease. We only require him to print those lessons he *has thoroughly learned to read*. Further, a line or two at a time is for a while a sufficient exercise, but the work of copying this line or two must be neatly and correctly done. From the commencement the pupil must be made to understand that we do not so much wish to know how *much* work he can do as how *well* he can do it. By again and again copying out the words of his lesson, and observing their forms, he gains a mastery over the new and strange letter combinations, and gets the images of the words firmly impressed upon his memory. He gains, too, as he proceeds, the power of analyzing the letter-contents of words with more and more rapidity; and when he finishes this reader, experiences little difficulty in doing it.

On his attaining to the Second Reader, we continue to require the pupil to copy every lesson; but now the work is to be done in writing, and after he has so copied it, selected words and phrases are to be dictated to him, to test whether his analysis of the words has been sufficiently exact. Every word he is unable to spell should be copied five or six times. As soon as the corrections have been made, the slates should be called in and an oral drill given on the mis-spelled words. If the class be large it should be divided into two sections, one of which can be engaged in copying the assigned lesson while the other is reading. Thus when both sections have read round they will also have finished copying the lesson assigned, and then both may be tested together by written spelling in the way previously mentioned. In the oral drill which should follow every test exercise of this kind, the pupil should be taught to give proper attention to the syllables, by making a pause after each. This not only costs no additional labor, but is found to diminish materially the difficulties of oral spelling, which arise from the pupil's being confused with the length of words. Of course a strictly accurate division of syllables need not be at first insisted upon. It will also be serviceable to associate the spelling of words with their pronunciation.

Canada School Journal.

A RATHER ODD SYSTEM.

UNLESS a boy be blind, or deaf and dumb (in which case he can be sent to an appropriate institution), or unless he has committed a misdemeanor that sends him to the House of Refuge, what public instructional establishment is there open to him in Pennsylvania to be taught industrial work? It seems a strange provision that of the good boys the physically disabled alone are provided with training schools to fit them for work, or to be mechanics and artisans in after life.

By this is meant the actual handling of tools, or such practical industrial training as makes the hand as ready as the eye. If all boys could begin with the kindergarten, where deftness and use of the hands is especially an object in certain exercises, the transition would be easy to the special implements of various trades and mechanical pursuits. If all boys were bad, the discipline of handicrafts might be administered to them at a sufficiently early age, by the wise provisions of our correctional institutions, in time to turn their ambition into these wholesome channels after the corrective had done its work.

But for boys who are neither blind, nor bad, nor orphaned, what anticipation is there in their education that they are to make their future living otherwise than by their brains or by personal service? The Girard College does not, it is true, give industrial instruction within its walls (whereby the manual dexterity, needed to be early acquired, must suffer loss), but is held by certain obligations to complement its earlier instruction with an apprenticeship without the walls, although not of necessity to a trade, other occupations being frequently chosen.

With the great range of trades and occupations, numbering a hundred and thirty, which have been selected by the graduates, the choice seems, so far as statistics of indenture indicate, to range from farmers, printers, accountants, salesmen, druggists, clerks, carpenters, plumbers, painters, to the manufacturing industries and lithographers, to architects and seamen. But as some of these occupations, in their turn, are stepping stones to the "professions," one of two things would seem to be indicated; that the industrial training does not come in early enough to give the boy an enthusiasm for it, and for the skilled opportunities in it that make it desirable in the main occupations of life, or that there is not enough in the trades themselves to hold an ambitious boy.

Whether the false ideas that make it seem a peg higher to stand behind a counter or desk than to drive a plough or handle a saw, are the result of exclusive brain-training in the schools, and chargeable upon the book system of education, certain it is that the public schools present no alternative in this direction. Now that the children are at home for the holidays, and the boys are experimenting with the new tool chest all over the house, and driving nails with an enthusiasm worthy of the best cause, the reflection is patent that school-life might be made not only much more valuable, but more interesting, by a judicious variety of hammer and grammar, and at least a pennyworth of hand-training to the "intolerable deal" of recitations, in which so little of

true education lies. The Governor has been trying for several years to get the attention of the legislature to this matter; and he tries it again in his recent message.

Phila. Ledger.

THE METRIC SYSTEM.

FAMILIAR EXPLANATION AND POPULAR SUGGESTION.

ALFRED L. KENNEDY.

WHEN the pound sterling as a unit of value in this country was, with its divisions into shillings, pence and farthings, abolished, and Congress declared the Spanish dollar to be the monetary unit, dividing it into tenths, hundredths and thousandths, the reform was far more important than its most ardent advocates predicted. This unit is, with but slight variation, that of the whole American continent north and south. In China and many of the commercial ports of the East it is the chief standard of trade values. The five franc piece of France, Belgium and Switzerland, in value closely approximates to it, nor is there any reason to doubt that all the African and Australian colonies of Great Britain, imitating their thriving American sister, Canada, will adopt it, and thus constrain the slow-moving mother country to do so. When the value of the German thaler, hitherto so frequently variable, comes to be finally fixed, there is good ground to hope that it will be made equal to the Spanish-American unit, and among the reforms contemplated by the heir apparent to the Russian throne, upon his accession, that of the currency of his country has, it is said, already a place. There is indeed reason to anticipate the adoption at no distant day of our monetary unit by the whole civilized world.

At home, our boys and girls learn the table:

10 mills..... 1 cent.	10 dimes..... 1 dollar.
10 cents..... 1 dime.	10 dollars.... 1 eagle—

in a few minutes. The time saved in study to all the children in the United States, by the substitution of this table for the English, is so vast in amount as to be worthy of calculation by a committee of social science philosophers and statisticians, and to that body we respectfully refer it. How much time the substitution has saved to the millions of our people who have used it, as well as how much is saved annually by its use, are questions too difficult of solution, we fear, even for the wise body aforementioned.

Now, why not have our tables of weights and measures as simple as our table of coinage, instead of the present cumbrous system, which came to us from England and is worthy only of the dark ages. No wonder the school boy is puzzled over the pennyweights, scruples, roods, rods, poles and perches; the two kinds of drachm, pound and ton, the three kinds of bushel, and the four kinds of gallon, quart, pint and gill. No wonder, despite his daily chanting in concert, that he spends years in trying to learn them in the public school. If we had a decimal system of weights and measures, he would learn his tables in a day. Calculate, oh! sage philosophers, if you can, how much time for other studies the adoption of such a system would give annually our dear American little folks!

Now France formerly had a system about as bad as ours, but she abolished it many years ago, and adopted one which is a model of scientific simplicity. Then why not introduce it into this country and Americanize it? The reason we hear urged for not doing so is, that the American people would never learn the French names! To this we reply that but few of the French names are necessary. We may enjoy all the advantages of the French system and use our own names for its units, just as a man may talk about his Paris hat without calling it his *chapeau*.

Every intelligent reader knows that a French scientific commission laid down accurately on a meridian what engineers call a "base line," that from this the commission determined with great precision the length of a direct line on the earth's surface from the equator to the pole, that the length of this line is the same on all meridians, that one ten-millionth part of this line constitutes the French standard of length called a *metre*, and that the metre is divided into tenths, hundredths and thousandths. So admirable is this system of "long measure" that scientific men of all nations have approved and adopted it, and the governments of Holland, Italy, Switzerland, Spain, Belgium, Chili, Brazil, and other countries, have introduced it. So too would ours, it is said, but for the formidable French names! Let us then open the way for its introduction here by removing some of these stumbling blocks. Let us begin by giving to the French standard of length the name of that measure of our own to which it is about equal. Now the metre is just a little longer than the English yard. It is less than a yard and a tenth; (39.37079) so near that it might be adopted under the name of the *new yard*, and so declared by Congress. The term "new" being employed solely to distinguish it from the present English yard, would be required only so long as both systems continued in use. As soon as the people became accustomed to the reformed system, they would drop the distinctive term. To make our table of long measure as simple as our table of coinage, we must divide our unit, as the French do, according to the decimal system, borrowing from the latter table the words mill and cent, using them as prefixes, and adding to each a vowel for the sake of euphony, thus:

Ten milliyards..... one centiyard.
Ten centiyards..... one deciyard.
Ten deciyards ..... one yard.

Not long could our barleycorns, inches, and feet stand before so simple a system as this. Equally short lived would be our terms for greater lengths—rod, pole, furlong, league—if, following the same ratio, we extend the table sufficiently, using equally expressive numeral prefixes, and calling a thousand new yards a mile. We use these prefixes in daily conversation, as when we speak of the *ten* commandments as the *deca*logue, and of the sacrifice of a *hundred* oxen as a *heca*tomb.

Is it probable that the American people would take a long time to learn to call ten yards a decayard or dekayard, and a hundred yards a hecayard, or to make the denomination more distinctive, a hectayard? We think not, and at the risk of being charged with repetition, give the complete table of

LONG MEASURE.

10 milliyards	1 centiyard.
10 centiyards	1 deciyard.
10 deciyards.....	1 yard.
10 yards.....	1 dekayard.
10 dekayards.....	1 hectayard.
10 hectayards.....	1 mile.

The mile of a thousand "new" yards is very nearly five-eighths of an English mile, and is the same as the *kilometre*, the denomination in which the French engineers express the length of their railroads.

*Liquid Measure and Dry Measure.**—If, as has, we hope, been clearly shown, by making the yard a metre in length, and its divisions and multiples by tens, our tables of long measure becomes as simple as our table of money, can our tables of liquid and dry measure be similarly simplified? At present they are "confusion worse confounded," a medley of gallons, quarts, pints and gills—four kinds of each! There is the wine quart, having a capacity of 57¾ cubic inches; the beer quart, containg 70½ cub. in.; the dry quart, about 67⅛ cub. in.; and the imperial quart, about 69⅓ cub. in. Gills, pints, and gallons, also in quadruple *disproportion*, and bushels nearly as bad. The beer barrel contains 36 gallons of 282 cub. in. each; the wine barrel 31½ gallons of 231 cub. in. each; the petroleum barrel 40 wine gallons. There are 32 dry quarts in the Winchester bushel, used in this country, and 32 imperial quarts in the bushel used in Canada and other English colonies, as well as in Great Britain and Ireland. Thus the liquid and dry measures, legal and in most general use in the United States, differ from those of all other countries.

Every intelligent American must feel a sense of shame that anything so foolish and absurd as our systems (?) of measures of capacity should be tolerated among us. Nor will he wonder that combinations of men take advantage of the multiplicity of standards to serve their own purposes. One instance must suffice. The middlemen who buy of farmers the milk for the supply of Philadelphia buy only by the dry quart of about 67⅛ cub. in., while they sell to city families by the wine quart of 57¾ cub. in. The same is said to be true of other large cities, and the common charge of diluting the article is, therefore, not the only one to which these vendors are obnoxious.

Congress has not been altogether unmindful of the subject, for eleven years ago an act was passed "To authorize the use of the metric system of weights and measures," in which it is declared that "From and after the passage of this act, it shall be lawful throughout the United States of America to employ the weights and measures of the metric system, and no contract or dealing or pleading in any court shall be deemed invalid or liable to objection because the weights or measures expressed or referred to therein are weights and measures of the metric system." A joint resolution of both houses was also passed "To enable the Secretary of the Treasury to furnish to each State one set of the standard weights and measures of the metric system," which provides "That the Secretary of the Treasury be and is hereby authorized and directed to furnish to each State, to be delivered to the governor thereof, one set of the standard weights and measures of the metric system, for the use of the States respectively." Approved July 27, 1866.

Among the standard measures was not only the metre or yard of our new long measure before described, but also the litre or French quart, having a capacity of 61.02 cub. in. This quart is equal to a cube, the length, breadth and thickness of which are exactly one deciyard of the same long measure—about 3¼ cub. in. more than the wine quart, and about 8¼ less than the imperial quart; "a happy medium" between the two, which the people, ratifying the action of Congress, should substitute for the quadrilateral of quarts with which we are troubled.

The division of the new quart into tenths, hundredths and thousandths, and its multiplication by ten, hundred and thousand, may be expressed by one table, including dry and liquid measure, which we may call the decimal

TABLE OF LIQUID AND DRY MEASURES.

10 milliquarts	1 centiquart.
10 centiquarts	1 deciquart.
10 deciquarts	1 quart.
10 quarts	1 dekaquart.
10 dekaquarts	1 hectaquart or barrel.
10 hectaquarts or barrels	1 cubic yard.

The new barrel of 100 quarts has thus a capacity of 6102 cub. in.

Table of Weights.—Had our three tables of weights, known as the Avoirdupois, Troy and Apothecaries, been designed for the purpose of perplexing the learner, they could scarcely have been worse. He finds that 16 drachms make an ounce according to one table, and 8 drachms according to another, and hence concludes that the ounce of the former weighs just double that of the latter. He is incredulous when told that the latter is actually the greater by 43 grains. He sees that one pound contains 16 ounces, another but twelve, and he is positive that the latter must be exactly three-fourths of the former, when, to his great disgust, he is told that the relation is quite complex, viz., as 576 is to 700.

Different characters—℥ and oz.—stand for precisely the same weight. One coal-dealer always sells by the "long" ton, another by the "short," while a third gives his customer the choice.

The druggist buys his washing soda, epsom salts and cream of tartar by the pound of 16 ounces, and puts up preparations by that of 12. His scruples are as mysterious as are the pennyweights of the jeweler, or the practice of calling a hundred pounds a hundredweight in one place and one hundred and twelve pounds by that name in another.

To extricate ourselves from these absurdities of our tables of weights is not at first sight so easy as to reform our tables of length and capacity, because, while the metre differs but little from the English yard, and the litre from our quart, the kilogram, as the standard for what our most numerous class, the farmers and their families, have to buy and sell, is more than twice the weight of our avoirdupois pound, and therefore inconveniently heavy.

Again, the eye can grasp the "extension"—that is, the length, breadth and thickness—of an article of trade, and the mind accommodates itself more or less to a change of standard. But weight is an invisible property of matter, and when a standard of weight has been long and generally accepted by a people, the substitute offered for that standard, in order to be cheerfully adopted, must approximate to it. Hence, in the retail groceries of Paris one hears the customers call for so many demi-kilograms (half kilograms) of the solids they want, instead of so many kilograms. The demi-kilo., as they abbreviate it, approximates in weight to the old French livre or pound, and is associated in their minds with it. The Germans—slow, perhaps, but generally sure—when taking steps to introduce the French system, adopted the half kilogram as the pound, and we are more and more confirmed in the opinion that their example ought to be followed in this country. Perhaps it was a states-

* The new table of square measure is easily made from that of linear, by prefixing 100, thus: 100 square milliyards = 1 square centiyard, etc.; the new table of cubic measure, by the prefix 1000, thus: 1000 cubic milliyards = 1 cubic centiyard, etc. Land measure, not being used in the ordinary transactions of rade, either domestic or foreign, is for the present omitted.

man's forecast which caused a Secretary of the Treasury to include a half kilogram among the standard weights of the metric system sent to the governors of the States, under the joint resolution above quoted.

The demi-kilogram weighs 7716 troy grains, about $1\frac{1}{10}$ avoirdupois pounds. The divisions and multiples, according to the decimal system, are just one-half of the corresponding ones in the French table, and may be converted into them with the greatest facility. For the convenience of the apothecaries and others requiring small weights, the term "grain" may be retained and applied to the one-ten-thousandth part of the new pound; and, as a concession to the popular use and application of the word "ton" it also may be retained and made to stand for 2,000 new pounds, about 2204.6 avoirdupois pounds, and therefore between a "long" ton and a "short" one. As thus constituted, the pound being the weight of a half quart (new) of distilled water, at the maximum density, the following would be the new

DECIMAL TABLE OF WEIGHTS.

10 grains	1 millipound.
10 millipounds	1 centipound.
10 centipounds	1 decipound.
10 decipounds	1 pound.
10 pounds	1 dekapound.
10 dekapounds	1 hundredweight.
20 hundredweight	1 ton.

Congress has legalized the metric system; the people of any State, through their State legislature, may adopt the system at any time, and when adopted by one State the others will follow. Who among the intelligent members of the thirty-eight legislatures will take the initiative next winter? The only popular objection to the French system—the hard foreign names—we have sought to remove, retaining the decimal feature.

Friends of the reform are invited to get up and circulate petitions for it. We ask the press of the country to aid the good work by transferring to their columns the condensed article we have contributed, and by drawing attention to the subject. With editors for teachers, the people will soon call upon their representatives for the reform; the representatives must obey, and lo! the work is done.—*Polytechnic Review.*

EDUCATION OF THE FARMER.*

ARISTOCRACY has always opposed the education of labor. Each of the three great aristocracies has its own pet dogma on the subject. The aristocracy of Caste asserts that the great mass of mankind are born to serve, and the less intelligent the servant the more cheerful and docile the service.

The aristocracy of Capital asserts that intelligence increases the price of labor, and hence is a tax on capital. The more intelligent a man is, the greater are his wants, and the higher must be his wages in order to meet his increased necessities. Ignorant labor has few wants to supply, and hence is content with low wages.

The aristocracy of Culture asserts that the great mass of mankind are born dullards, and all attempts to educate them are futile. The few on whom God has bestowed the gift of brains are commissioned to do the world's thinking, and thus monopolize the right to education.

These dogmas unite in opposing all efforts to uplift the laborer by the power of education. The present condition of the country fills the air with their assertion in some form or degree. There has been a rush of young people into positions which do not tax the muscle, with a growing disinclination to obtain a living by hard work, and all this is boldly charged against the schools. Schooling spoils children for labor, it is asserted; it makes them discontented and idle, etc.

It is too common a trick of logic to connect two contemporaneous phenomena as cause and effect. The moon is thus made responsible for many results in agriculture; and the schools are just now made responsible for many of the ills that afflict humanity. It is possible that the schools are not doing enough to inculcate a respect for labor, and disrespect for idleness. They may not be sufficiently effective in correcting evils which have their source outside of school-rooms.

Many causes have been contributing to the evil which has been mentioned. The first of these is the influence of slavery, which once permeated the entire country with degrading views of labor. It will take a hundred years to recover from the influence of the slave code with its "mudsill" theory of labor. Another cause is immigration, which has filled nearly every department of common labor with ignorant and cheap workmen, crowding out intelligence or subjecting it to unpleasant social conditions. A third cause is the rapid development of the country, opening a multitude of employments and bidding for bright and intelligent youth to fill them, thus causing a rush, so to speak, from the farm into the towns and cities. Political and social ideas, resulting from free institutions, have also done much to incite the ambitious and aspiring to seek those employments which lead to public life and official position. They have also tended to make the idea of service unpleasant.

Much of the idleness which disgraces and degrades our industrial life is due to inborn

*From an address delivered before the Indiana State Board of Agriculture, by Dr. E. E. White, President of Purdue University.

laziness. A disinclination to work is no new thing under the sun. It is as old as human nature, and there is no evidence that it is peculiar to the educated and intelligent. On the contrary, the lower the condition of a people, the less the inclination to work. In savage tribes the work is done by those who are compelled to toil either by hunger or external force. In half-civilized nations the work is chiefly done by the women, who in all material respects are slaves, and generally men do not work except from necessity or interest. Until human nature changes there will always be persons who prefer to get a living by their wits—however it may be readily obtained—rather than by manual toil.

These, and other causes which might be named, are certainly sufficient to account for the condition of American industry, without charging it to the schools. Schooling may spoil some people, but many more are spoiled for the want of it.

Over against these dogmas of aristocracy we put a few propositions which are abundantly sustained by experience.

1. Education promotes industry and lessens idleness. It awakens and multiplies desires, and thus incites effort to secure the means of their gratification. The Indian builds his rude wigwam and fashions his bow and arrow and tomahawk, and with these his wealth and industry cease. Ignorance everywhere clothes itself in rags and lives in hovels, but when man's nature is opened by education his desires clamor at the gateway of every nerve and sense for gratification. Effort is thus incited, and the forms of industry are multiplied. Wealth is the child of intelligence.

2. Education makes labor more skillful and more productive. This statement is based on wide comparisons of intelligent and ignorant labor, and is no longer questioned by any one familiar with the facts. The hand is another hand when guided by intelligence, educated skill, and the nations are now appealing to education to give success to their industrial interests.

3. Education improves the condition of the laborer. Nowhere do educated people cover their nakedness with rags. Intelligence creates wants and impels to effort, and thus multiplies and secures comforts and easements. It adds to the dignity of labor.

In conclusion, the speaker applied these principles to farming, urging that no industrial occupation demands greater intelligence, or wider information, or affords more time for self improvement. He urged the importance of carrying the education of the farmer higher than the mere rudiments. He showed the practical value of a knowledge of natural history, not only for guidance but as a source of enjoyment. Intelligence will make the life of the farmer attractive, and greatly relieve it of the disadvantage of isolation. Education may take a few boys from the farm, but it will make many more contented with its duties and rewards. *Ohio Ed. Monthly.*

THEORY OF TEACHING.

JOHN H. HARRIS.

EVERY one who has attended school has some theory of teaching. He has seen others teach; has noticed their arrangements; has observed what plans have failed, what succeeded. Mere observations constitute his theory of teaching. The young man, then, who designs to make teaching his vocation, is in much the same position as the farmer's son who follows the calling of his father. His danger, as well as his advantage, is about the same. His advantage is that he already knows considerable of his calling; his danger that he may rest satisfied with his present acquisitions. What he has is not to be despised: what is good is to be retained and made better; what deficient supplied; only what is bad rejected.

This theory should be improved. This can be done by energetic thinking on his own part. As the preacher forms a homiletical habit, so that the incidents of life, the phenomena of nature, in short, whatever he sees, is transmuted into illustrations of religious and moral truth; so the teacher's mind should spontaneously busy itself with its calling. In this way, his mind, instead of being a dusty garret filled with other men's plans, will be a fountain from which will well up the fructifying conceptions of his own nature. If a man is poor, he will, like Horace, be poor in his own coin, at least. He will not, however, be poor long. It is by creating that the mind grows. Every one must, in his measure, fix his mind, like Newton, upon a point, and wait till the light comes. And with the coming of the light, his mind's affinity for the light will be so increased that light will come more easily and more abundantly next time.

Next after thinking I place experience. A man must think at a job before he attempts to do it; he must have a plan before he can try his plan; so theory must precede practice. But theory is tested and improved by practice. Only that is a good theory which holds good in the working. With these, unite observation. Much is to be seen in the world, and but little is seen. Men have eyes and ears, but they do not

see nor hear, or seeing they receive not and hearing they do not understand. For the man who knows how to use his eyes, the chances of success are indefinitely increased.

But the teacher should make excursions beyond his own horizon. Let him acquaint himself with the thoughts and experience of others. He need not be afraid of thereby impairing his originality. That originality has but a feeble life that needs to be thus coddled. The most original writers,—Milton, Bacon, Burke, for example,—have been widely acquainted with the writings of others. Shakspeare has been called "the universal absorbent." So all summer long the tree absorbs the juices of earth and air, but in vain would I seek in earth or air for these delicious apples. This increased range of knowledge can be gained by personal intercourse with neighboring teachers, by attending institutes, and by reading. The literature of Didactics is already extensive, and is rapidly increasing. Most of it is good; none so poor that not anything can be gleaned from it. The teacher may not be able to buy many works. This in most cases will not be a disadvantage. One book thoroughly mastered, read and re-read and inwardly digested, is worth a library hastily read. Wickersham's two works, "Methods of Instruction," and "School Economy," are all that a teacher needs at first. These should be carefully studied, and the principles enunciated in them tested as far as practicable by actual trial in the school room. A teacher who has mastered these two works has a foundation of solid knowledge upon which he may build as opportunity offers. He should be a careful reader of one or two good teachers' journals, also, in order to keep in sympathy with the great living, moving world around him.

THE PARENT'S VISIT.

THERE is no calling that is receiving the microscopical attention that is bestowed on that pursued by the teacher. Right or wrong, every household sits in criticism. His acts are reviewed, and he is adjudged a wise and good man, an "average teacher," or a fool. He spends his days over human nature, boy nature, tough, unpliable, resentful, inelastic and frequently unshapable; or over girl-nature, willing to learn, ready to commit to memory, but alas! difficult to comprehend, although many a teacher mistakes the readiness with which she recites for absolute knowledge. He devises innumerable plans for governing those that are never governed at home; and gives his best thought to the overcoming of petty obstacles that are amenable to no law. He undertakes to pour the wisdom of the present generation into that which is to succeed, and that generation cares but little about it.

Yet the teacher has a profound responsibility resting on him. His work is eternal and ineffaceable. Whether he does it well or ill it stands all the same. Hence he does well to feel his shoulders burdened like a second Atlas. A moral world is upon him, uphold it he must. And it is because he bowls this round ball of responsibility before him, rather than mounting it upon his shoulders, that causes the dissatisfaction the parents feel. Let us suppose, for example, a parent invisibly to enter a school-room, inspect the proceedings during a single day. Losing sight of all other children she only watches her well-clad, resolute John. The school-room is perhaps cold and John comes in from running and must sit still and cool off while the Bible is read; or it is a wet morning, and his feet are soaked with snow aud water, or he is to stand in a cold hall in a draft, or sit where a window is open. She follows him to his seat—there he is beside a lad she knows is vicious, a liar, profane, obscene, uncleanly, well acquainted with tobacco in all its forms. She is about to bid him come away from his polluting neighbor, but finds herself in a nightmare and unable to speak; she can only look on. She sees him form one of a grammar class, and hears rattled off idiotic definitions of things she knows are of no matter of use when learned ever so well; she hears him give an analysis of a problem in arithmetic that she is sure makes it no plainer to John's mind. As far as the reading and spelling go she has no fault to find; but in writing she is sure the method employed will never make a good penman of him. How horribly he does write when she asks him to indite a letter! She watches the operation only to note how unskillfully it is taught.

On the whole she feels that if John is educated it is quite a matter of accident. Lessons he has in plenty. He recites some things over so many times that she is sure it is a positive injury to his mind, because he puts his thoughts on something else. Determined to give the instructor the benefit of her visit, she writes on the blackboard, *Let every teacher teach as though every parent were present.* And if they follow this direction, it will certainly improve many of the processes now employed.

A LANGUAGE LESSON.

H. B. BUCKHAM.

NO parts of speech are so much misused and abused as adjectives and adverbs denoting quality or manner. The school girl's three adjectives for one noun are proverbial, and the debilitating effect of the same parts of speech may be seen in any piece of poor or ordinary writing. Sensational stories and exhibition essays depend on them for their most striking effects, and as mouth-filling and page-filling expedients they have no equals in the language. Interjections are useful to this end, but they are too short in sound and too few in number to meet the demand. Adjectives and adverbs are the great treasury of words for writers afflicted with poverty. But no words are more helpful and more forceful than these when they are used with judgment and taste. A good writer always makes them contribute to exactness and completeness of composition, and he does this by selecting such as express the qualities he wishes to attribute to objects and actions, and by rejecting all others.

A very useful language lesson may be made in this wise. Take any well-written paragraph and challenge every adjective and adverb in it, by inquiring whether each is appropriate in its place, whether it is necessary as used, what it adds to the meaning of the phrase, whether some other would do as well, etc., together with the exact meaning of the word, and the particular sense in which it is used in the given passage.

For an example, the following passage from the first chapter of Scott's Ivanhoe may be taken:

"The sun was setting upon one of the rich, glassy glades of that forest which we have mentioned. Hundreds of broad-headed, short-stemmed, wide-branched oaks, which had witnessed, perhaps, the stately march of the Roman soldiers, flung their gnarled arms over a thick carpet of the most delicious greensward; in some places they were intermingled with beeches, hollies, and copsewood of various descriptions, so closely as totally to intercept the level beams of the sinking sun; in others they receded from each other, forming those long, sweeping vistas, in the intricacy of which the eye delights to lose itself, while imagination considers them as the paths to yet wilder scenes of sylvan solitude."

Here is a picture, the beauty and vividness of which depend, in large part, upon the interpretation to the mind of the reader of the descriptive words or adjectives. Knowing first what a glade is, what better idea of it has the mind by the two words *rich* and *glassy?* Consulting Webster's Unabridged Dictionary, we find that *rich* means, in general, abounding in material possessions. Looking down the list of different shades of meaning, we find the idea of fulness and plentifulness characterizing them all, and under division 8, the special sense of *abounding in beauty*, as *rich* scenery. This is Scott's meaning here: the glade was so full of woodland beauty that he could call it *rich*. *Glassy* means first made of glass, and second, having the properties of glass, as smoothness, brittleness, transparency; which of these can be attributed to glade? Now, glade in old English means, shining, bright: objects which appear bright or shining have the appearance of smoothness, and that is the sense in which the word must here be interpeted: the sward and the leaves were smooth and bright, or glassy. We have learned, then, the distinctive use of two common words as applied to a scene in the woods; the scene is more vivid, because more definite, for these two adjectives; wealthy would not do in place of rich, nor vitreous in place of glassy; if either were omitted, the general appearance of the glade would be less real to the mind's eye, and the description less complete.

Take next the three words descriptive of the oaks: broad-headed, short-stemmed, wide-branched. How these taken literally put the distinctive appearance of the oak tree before us, if we have ever observed the difference between the oak and the elm or the pine, or if, having had our attention called first to the fact by this description in Ivanhoe, we verify it by observing the trees when next we see them. Here are the "three adjectives," but would the ordinary school-girl be content with three such homely, literal ones? And yet, could any one find three more accurate descriptive terms, which would, if we understood their meaning, put the oak trees right before our eyes?

So all the way through the extract; make real, interpret to one's self, the *stately* march, the *gnarled* arms, the *thick* carpet, the *delicious* green-sward, the *level* beams, the *sinking* sun, the *sweeping* vistas, the *wilder* scenes, the *sylvan* solitude, and the forest grows more beautiful as it grows more real; it stands for something, because it addresses the imagination with real, apprehended qualities, which belong to the objects described.

This passage does not give the opportunity

of questioning adverbs in the same way, but proper passages for this purpose may easily be found.

It is obvious to say that passages and authors should be selected with reference to the class of pupils who are to use them, and that such a lesson may be part of a recitation in Grammar or Rhetoric or Literature, and not of necessity a set lesson by itself. It is obvious to say further, that many such lessons would not be too many.

School Bulletin.

REVISION OF SCHOOL LAW.

MESSRS. EDITORS:—It is generally conceded, we believe, that our School Law needs revision. By your permission, we will offer a few thoughts on the subject. It would certainly be fair that School Directors should receive a small compensation for a few regular meetings, say about four, in each year. The law should in some way regulate the amount the Secretary should receive. As it now is, some Secretaries receive nothing at all, or only a few dollars for each years' service, while others receive exorbitant amounts, in some cases getting more for a few days' service than ordinary teachers do for an entire month's labor.

Some change in the law as it regards the County Superintendency seems absolutely necessary. Either the law requiring visitations should be abolished, or some more efficient mode than the one now practised ought to be established. If visitations are necessary at all, a visit to each school by some qualified person once a month, would not, we think, be too often. The law requires the Superintendent to visit schools as often as practicable. Each County Superintendent is allowed, so far as we know to make his own definition of the word "*practicable.*" One Superintendent spends all his time, while the schools are in operation, in supervising the schools, and thinks he has done *no more* than that which is "practicable." Another spends only a very small portion of his time, and yet seems to think he has done *all* that is "practicable."

The law says, no person shall be eligible to the office of County Superintendent "unless he has had successful experience in teaching within three years of the time of his election." In order to fulfill the letter of the law, a person who perhaps never taught school before in his life will teach a small private school for a few weeks, and then offer himself as a candidate. The law should be more definite in this respect. There is an inconsistency in the present law in making a person who holds a college diploma eligible to the office of County Superintendent, yet not allowing that very diploma to be sufficient authority to allow him to teach a common school. In our opinion, one of two things should be done in order to secure justice in awarding certificates: Either have a board of examiners, instead of a single individual, to examine teachers; or else let there be some fair chance for an appeal from the County Superintendent's decision in regard to certificates, particularly professional certificates.

Emporium, Pa. R. CHADWICK.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, MARCH, 1878.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

IT has been decided by the Attorney General, in which opinion the Superintendent of Public Instruction concurs, that under the new Constitution school directors can elect, as county, city or borough superintendents, any persons they may select, whether citizens of the county in which they are elected or otherwise. In other words, at the forthcoming elections for superintendents the directors can elect the best man, whether they find him within the county or without its limits. They may even bring him from another state or county, if they see proper.

THE bill prepared by the municipal commission and commented on in the last number of THE JOURNAL, so far as it relates to education, seems to meet with universal opposition from school boards and the friends of education. The boards of education in all our cities are opposed to it. Some of them have petitioned their Representatives in the Legislature to vote against it, and all of them will, no doubt, do so should there be any danger of its becoming a law.

THE "Medical Society of the State of Pennsylvania" at its session, in 1877, prepared a bill for the creation of a State Board of Health, and appointed a committee to present it to the Legislature. The bill provides that the State Superintendent of Public Instruction shall be a member of this Board, with a view of obtaining and imparting through him information concerning the hygienic condition of our school rooms. There can be no doubt that poor light, unequal heat, currents of cold air, noxious gases and uncomfortable seats are doing much to undermine the health of thousands of school children. A wisely constituted Board of Health may find a remedy.

DR. SAMUEL ELIOTT was recently elected Superintendent of schools in the city of Boston. He takes the place of Hon. John D. Philbrick, who has long and ably filled the position. Mr. Philbrick was a candidate for re-election, but certain influences have been in operation for a year past which crippled his work and finally brought about his defeat. We are sorry to see a Nineteenth Century city repeat the old folly of "stoning its prophets," but we predict that a day of repentance will come—and soon.

THE old University of Cambridge, England, seems to be about to establish a Chair of Education. Such chairs exist at some of the universities and colleges in Scotland and Germany. The London *Educational Times* thinks the duties of such a chair should be both theoretical and practical,—theoretical in expounding the laws according to which all good teaching must be done; and practical in exemplifying methods of teaching in actual school-room work. If the time has come for establishing Chairs of Education in the Old World, how is it in the New?

SOME time ago, the University of Pennsylvania offered ten free scholarships yearly in the Towne scientific school to the pupils in the grammar schools of Philadelphia who should pass the best examination for admission to the Freshman class. This generous offer was received with much favor, but several difficulties have been met with in carrying it into effect. First, the course of study in the grammar schools was not arranged with reference to preparation for the scientific school of the University; and, second, the principals of these schools have no time to devote to small classes in special studies. The consequence is that but few boys from the grammar schools have been able to accept the scholarships, and the question remains an open one as to what is best to be done.

THE State of Ohio, so well advanced educationally in other respects, has no State Normal Schools. Her teachers and school officers have been *talking* in favor of establishing them for the last twenty years, but, so far as we have observed, there has been no *fighting* done on this ground. An enemy like that which stands in the way of establishing Normal Schools cannot be frightened by mere skirmishing or the firing of blank cartridges. Cannon balls, and bayonets, with stout hearts behind them, must be used to win a victory here. We are glad to see that at least one Buckeye teacher appreciates the strength and courage of the foe to be encountered, and is making ready for the struggle. Prof. John Ogden, a teacher, a soldier, and now a teacher again, has determined that Ohio must have a Normal School, and means to fight it out on that line until victory crowns his efforts. We like his bugle blast, and if we were an Ohioan, as we are a Pennsylvanian, we would join his ranks and either triumph with him or die by his side. But our sister state is noted for brave men; let them show their metal now, and unitedly determine that Ohio shall have a Normal School.

THE annual report of the Superintendent of Public Instruction has been much commended. The historical feature of it attracts attention upon all sides. There are errors in all the sketches, some of them cover the ground very imperfectly, there are those among them that do no credit to the writers; but on the whole, no work exists in the English language, or perhaps in any other, so full of facts showing the efforts made by a free people to educate themselves. We expect this volume to do much to deepen the popular interest in education. Let the history we are now making be entirely worthy a free people striving to maintain free institutions by instructing their children how to understand and appreciate them.

As a specimen of what is thought of the report outside of the state, we quote the following paragraph from a letter, received from Hon. W. K. Pendleton, Superintendent of Public Institution in West Virginia: "Thanks for the copy, just arrived, of your magnificent report. It is a model of its kind, and worthy of the vast work under your care, in your great state." Similar letters have been received from a large number of leading teachers and school officers throughout the country.

IT is the intention of the editor of this journal, either as a public document or as a private enterprise, to prepare a complete history of education in Pennsylvania. Use will of course be made of the materials collected by the superintendents and published in the annual report, but there remain vast stores of more general information concerning education still untouched. These will be diligently examined and whatever is valuable in them will be brought to light.

We write now to request all the superintendents who may become acquainted with facts not contained in their reports to forward them to us, and we would also be glad if all who read the report, or read *The Journal*, would aid us in making the contemplated work complete and accurate. We sincerely believe that the history of what a people have done for education is more worthy of record than an account of the rulers they have had or the battles they have fought. Of course, we know the kind of histories that sell best, but we have an ambition to write for a future generation that will value things according to their real merit. Who will help us?

WE are likely to have the opportunity of making cheap trips to Europe next summer. We have just received a letter from Supt. Luckey, of Pittsburgh, who says:

I have just received two propositions from a steamship company, as follows:

1. From New York to Paris, and return *via* London, $113.

2. From New York to Paris and return *via* Liverpool, $135. This route is three days less sea travel and in finer vessels.

Mr. Luckey suggest that a committee be appointed to make arrangements for a teachers' excursion. We think this a good suggestion. How many will go? The trip can never be made under more favorable circumstances.

A large number of teachers and friends of education unite in naming as the committee above suggested, Superintendent George J. Luckey, of Pittsburgh; Dr. George P. Hays, President of Washington and Jefferson college and Chairman of the Executive Committee of the State Teachers' Association; Deputy State Superintendent Houck; and they are accordingly requested to take such action in the matter as they may deem proper.

AN effort is being made to establish near Pittsburgh, an Institution for the Deaf and Dumb for Western Pennsylvania. This effort grew out of the day-school for deaf-mutes, which was established by the public school authorities of the city of Pittsburgh, some years since. It was found that a day-school, was not the best kind of an institution for this class of unfortunates. Hence an appeal was made to the benevolent for funds to establish a permanent institution, the Legislature granted an appropriation for the purpose, and a property was secured at Turtle Creek Station, some twelve miles east of Pittsburgh, and pupils have been received to the number of sixty. The institution may be considered a success, and it is now the purpose of its founders to erect suitable buildings and provide equipment equal to the best institutions of its class.

A PROJECT is on foot to hold an educational conference, composed of English and American teachers and friends of education in England during the coming summer. It is assumed that a large number of persons interested in education will visit the Exposition at Paris, and in so doing will pass through England; and it is thought that in this case it could be made convenient and pleasant for them to stop a few days in London or some other suitable place, and make the acquaintance of and hold council with their English brethren. We vote for the conference. We think it would do good. And the only difficulty in the matter is, as it occurs to us, whether there can be assembled in England at any one time a representative body of American educators.

WE gather the following significant facts from the Twenty-fourth Annual Report of the Pennsylvania Reform School:

The number of children received in commitment during the year was 153—boys 120, girls 33. All of them were over seven years of age and under twenty. The average age was about fourteen. Of those received 23 were illiterate, 5 could spell only, 40 could read imperfectly, 6 could read well, 38 could read and write imperfectly, 7 could read and write well, and 34 could read, write and cipher. 78 were either whole or half orphans, the parents of 14 had separated, and those of 55 were living together. 123, or nearly four-fifths of the whole, were committed for incorrigibility, vicious conduct and petit larceny. These statistics tell the whole story of juvenile misconduct and crime. The causes are patent on their face: *parental neglect*, *idleness* and *ignorance*.

ABOVE we have a few statistics from the reform school. We have before us also the late report of the Western Penitentiary. What lessons of the same kind may we learn from it? The prisoners received during the past year number 396—196, or nearly one-half, of them were under twenty-five years of age, some of them mere boys; 76

were between 25 and 30; 145 were orphans at 16 years of age; 314 *were without a trade of any kind;* 50 could not read or write; 90 could read and write imperfectly; and 256 could read and write with some facility. The report does not say how many were well educated, but we have seen the inside of too many penitentiaries not to know there were very few of this class. The report says 328 had attended public school, 4 had attended private school, and 64 had never gone to school. We look for some thoughtless person to infer from the fact that so large a proportion of the prisoners attended public school that the public school prepares people for the penitentiary. Such things have been heretofore gravely published. The truth is, that very few of the whole 328 attended any school long enough to be benefited by it. Most of them probably were a few times inside of a Sunday-school or on one or more occasions sat in a church or listened to a sermon, and no one would think of blaming Sunday-school, church or preacher for their bad doing. No more should public school or teacher be held responsible for it. The causes must be looked for elsewhere. As before, *parental neglect, idleness, ignorance* have much to do with it.

IN the northern parts of Sweden and Norway, where the population is sparse, no school houses are built, and the children are instructed at their homes by itinerant teachers. The country is divided into districts each containing a certain number of families. For each district a teacher is employed, and it is his duty to pass around among the families and hear recitations and assign lessons. Sometimes the children of several families meet together, and sometimes school is open for a certain length of time in one district and then closed to enable the teacher to give instruction in another district. Frequently the teachers are aided in their work by the fathers and mothers of the children or their elder brothers and sisters. The result of this method of instruction is that there are very few grown-up men or women in the sections of country where it has been adopted who cannot at least read and write.

THE Tioga *Express* has the following paragraph concerning the State Normal School at Mansfield:

Electric bells have been introduced throughout the buildings and prove as much a convenience for schools as for hotels. Professor Allen has purchased a telephone and has his residence, the normal school, soldiers' orphan school, and the farm and agricultural departments of the latter institution, all connected by it. As some of the above are over half a mile apart it is a matter of great convenience, besides being a fine acquisition for scientific purposes. The professor can sit in his office and converse with the superintendent of the farm, half a mile away, with as much ease and accuracy as though he were present in the same room. They have also instituted a free course of lectures, by eminent men, which has proved both enjoyable and profitable. They now have upwards of 200 students attending the normal, and about the same number in the soldiers' orphan school, and 100 in the model school, where the students are given the practice as well as the theory of teaching. Much has been done to supply the school with first-class charts, apparatus, etc.

THE editor of the Ohio *Educational Monthly*, who seems to know about everything worth knowing, publishes the following facts concerning Pennsylvania educational periodicals:

The following is an account of the school journals published in Pennsylvania prior to the establishment of the *Pennsylvania School Journal*. The Philadelphia Association of Teachers established, in 1831, the *Journal of Instruction*. We do not know how many numbers were issued. In 1834, in Lancaster, *The Inciter* was started. We do not know how long it lived. In 1835, E. C. Wines established, in Philadelphia, the *Monthly Journal of Education*. It closed its career the same year. The Faculty of Lafayette College established at Easton, in April, 1838, *The Educator*, which was discontinued in 1839. In January, 1843, the University of Pennsylvania established, in Philadelphia, *The University Magazine*, which was discontinued the same year. In January, 1844, John S. Hart established, in Philadelphia, the *Common-School Journal*, which was discontinued the same year. In February of the same year, E. Rea established, in the same city, the *Teacher's and Pupil's Advocate*. We do not know how long it was continued. We know of no other school journals established in Pennsylvania until the establishment of the present journal by T. H. Burrowes, except the *Teacher's Magazine*, established by J. J. Buchanan, in Pittsburgh, in November, 1850, of which not more than two numbers were issued. It should be stated that in 1812 there was issued at York, Pa., by S. Bacon, a Prospectus for the *Academic Herald and Journal of Education*. We know nothing further of the enterprise. We might prolong this discussion of educational periodicals, but we have already occupied more space than we intended.

AN exchange has the following concerning school museums:

Our schools need generally more material for illustrating the subjects taught. The best school museums are not always those that please us most as we look at them. Those are best in which the pupils have most identified themselves with the collection. The interest of collecting deepens the impression of the knowledge illustrated. A few pieces illustrating the local geology or the native woods, may be gathered with such discriminating instruction suggested by each that it shall be of higher value than a more showy and more costly collection.

One of the best museums in Illinois is hardly large enough to call by such a name. It is simply a plain case, two feet by three, perhaps, fitted with shelves and a glass door, fastened upon the wall, and containing some dozens of small wide-mouthed bottles. Each of these bottles contains some form of spice, of tea, of coffee, of mineral or vegetable substances in common use. The school has a large map on Mercator's projection. Daily a five-minute exercise is given in which two pupils take, each, one of these bottles, and standing by the map, each proceeds to give a history of the commodity, telling where raised or made; how prepared, for what used and so on. Geography; political economy; domestic economy; manufactures; natural and artificial resources of various people, are thus brought sharply to notice, while the pupil gains in his power with language and in readiness of expression of his own thought. The collection of objects of rare interest is not limited to the series of bottles.

The sample of Mocha coffee which is there was obtained through difficulties which they can appreciate as affecting the market for that kind, even though an Arab might still claim a choicer variety, as Palgrave tells us the best of all does not go out of the country. The taste of the pupils in reading has been materially aided. They have a better purpose in looking over books, aiming to secure some definite information, and indirectly it educates the community, for these topics are talked over at the supper tables and in the shops, from the children's questioning at home.

AN "Old Director" writes:

In a recent issue of *The School Journal*, I see you want short articles from directors on educational matters. Now, in the matter of School History, different authors do not agree in regard to the men who made the discoveries, nor as to the dates of such discoveries. Would it not be a good plan for these compilers of school histories to meet together, bring in their data and proofs, and agree to give the honor for a given discovery to one person, and not to several? Perhaps, however, it would interfere with the sale of the different books, if they agreed in such matters. In this way a pupil would not be constantly learning and unlearning discrepancies in history, to call them by no harsher name; and any one who has thought upon the matter knows that it is harder to remove from the mind of a child anything once learned than it was to teach it the date or fact correctly at first.

TYRONE SCHOOLS.

THE following observations, made by a visitor to the Tyrone schools, have a wider application than in the town where made:

A very evident mark of progress may be seen by a visitor who can compare the appearance of the scholars in any of the middle-grade rooms, as to age and size, with what they were a year or two ago. Then there were many large scholars mingled with a few forward little ones. Now all are small, and there is quite a uniformity as to age, proving a general uniformity of advance. And the full measure of the advance comes to view when it is seen that these comparatively little boys and girls are very much better scholars than the older occupants of the same rooms were; their recitations are orderly, correct, animated and expressive; and the quondam looks of dull apathy are scarcely anywhere visible.

The fact is that the lower grades have been pulling upwards with an accelerating rush ever since the impulse was given by providing first-class care and skill for the little beginners. They spring under it like plants under the April sun. The ball, thus well started, is kept rolling upwards by the zeal of successive teachers; and the crest of this wave of rising young Tyronians is now within a room or two of the High School. Above it there is still a medley as to progress, and still serious default as to attendance, which the excellence of the schools themselves cannot cure, because it is old and chronic. It is to be hoped that the disease—truancy—the worst of dangers as regards the State—may be prevented by parental care (or, where this fails, by State care) from infecting the promising host that is now coming forward so well.

The lately introduced system of report and record has been faithfully carried out, and has had great influence. So has the system of promoting from each class whenever a certain line has been perfectly reached, so that the scholars promote themselves. Slates play a great part in the procession of progress, and at the last meeting of the board it was decided to supply the two schools next above the infant with handsome noiseless slates, all of one size. These have a superior grain and writing face, and will aid the learners greatly, while saving the teachers from much annoyance, interruption and loss of effort. The rules under which they will be used will afford valuable exercise in the useful virtues of care-taking and responsibility.

There are fewer visitors to the schools than the importance and the interesting nature of the work done there might lead one to expect. Visitors are always welcome, the rooms are comfortable in all weather, there are spare chairs, and the mere silent presence of a stranger, and much more of a friend, has a most pleasurable and beneficial influence on the ardent and sensitive little students.

THE HIGHER EDUCATION OF GIRLS.

AN article in *The Penn Monthly* contains the following paragraphs, showing what is being done in Philadelphia and vicinity for the higher education of girls:

First: There is the *Girls' Normal School*, with its 900 pupils, and School of Practice, occupying, it is said, the largest and best arranged building for such a purpose in this country. The course here, as we have said, extends over four years, and during that course, every one of the subjects required at the Harvard advanced examination, except the foreign languages, is studied systemically, and certain others which are not required—notably, music and drawing—are taught. It is true that this school is designed chiefly to supply the public schools of the city with teachers, and that, in point of fact, it has given to those schools nearly all of the 1,850 teachers now employed; still no one who attends the school is under any obligation to become a teacher on leaving it. If the answers to the questions at the final exami-

nation be any test of culture, then the young women who pass it may be regarded, by their friends, as well educated, because their passing it satisfactorily shows the good effects of four years' hard work.

Second: Swarthmore College. This is an institution, recently established by the Society of Friends, within ten miles of this city, and drawing many of its pupils from it. Its system of instruction is liberal and comprehensive, its apparatus is of the best modern description, and the standard of scholarship is very high. In this college, the theory of the co-education of the sexes is fully carried out in practice; in other words, it has been thought expedient to teach boys and girls the same subjects at the same time, and under the same conditions. The number of students of each sex is about the same. The range of studies is far wider than that within which it is proposed to test the knowledge of women by the Harvard examinations, while it includes them all. Indeed, it is easy to see that any one who has faithfully pursued that course during four years, would regard the answers to the Harvard papers as calling for very light work. They have some eminent teachers at this college. Their professor of mathematics, although she happens to be a woman, is well known as one of the foremost mathematicians in the country, and two of their non-resident professors are recognized among scholars everywhere, as men of the highest authority in their respective departments. If the teaching corresponds at all with the opportunities, and we have every reason to believe that it does, we are, we must say once more, at a loss to understand where that deficiency in the means for the higher education of women in this part of the country exists, to supply which it has been necessary to resort to this Harvard importation.

Third: The University of Pennsylvania. Recently, arrangements have been made to encourage young women to pursue certain advanced studies here. This has been done in simple obedience to the law of supply and demand. The University has no theory, concerning what is called co-education of the sexes, to support, nor any plan to establish, nor any prejudices on the part of its officers, either on one side or the other of this question, to overcome. The admission of women as students, was brought about in this way: Applications were made, from time to time, from young women, asking that they might avail themselves of the advantages offered at the University, for the study of chemistry, physics, and history, the applicants stating that these advantages—especially for the study of the first two-named subjects—seemed to them exceptionally good. When it was found that these ladies proposed, without exception, to become either physicians or teachers, and that they asked of the University, what was essential to their calling, and what, according to their own statement, they could not find elsewhere, except at great inconvenience, the authorities would not only have been unjust, but cruel, if they had denied their request. They are there as special students, in precisely the same position as the young men who are special students; the instruction being the same, and the conditions of the examinations, entrance and final, being the same for both sexes. What may be done in the future, depends upon the wants of the future, as they may be developed by experience. What is essential now is that those young women who are in earnest in their desire to study chemistry, physics, and history, should understand that a certificate of proficiency, awarded by the University, upon a final examination after a full course, is likely to be as good a test of their real knowledge of these subjects, and to be accepted as such, as any that can be procured elsewhere.

TEACHING NATURAL SCIENCE.

A GENTLEMAN deeply interested in natural science has written us a private letter, pointing out the way in which he thinks collections of objects in the natural sciences may be made and used for the purposes of instruction. Elsewhere Miss Walk speaks of the kind of work which he, Prof. Ennis, did last summer with his class in Botany. We quote below a portion of his letter:

1. *Mineralogy and Geology.*—Our state geological survey has collected large quantities of specimens, which Governor Hartranft informed the Legislature are stored away in boxes and barrels, awaiting a proper public building for their reception and exhibition. That same state survey can easily collect any quantity of specimens, and from among these I would have special cabinets made up adapted to the wants of all the learners in all our schools. With these cabinets I would have a simple elementary book on minerals, describing particularly all the minerals in our own state. Already I have such a small book in preparation. This book would explain the cabinets of minerals, and the minerals would explain the book, for the latter would be unintelligible without the minerals described. Along with these could be prepared a geological map of our State, and also a general geological map of the United States, together with a small easy book on geology. Such a book I have already nearly finished.

These cabinets of mineralogy and geology, and these maps, could be exhibited and lectured on in all Normal and High Schools, and in all the better schools of the large towns and villages. They could be made the subjects of lectures at the teachers' institutes, and thus work their way to the lower country schools. From my experience I know that many teachers would be glad to have these new sources of knowledge opened to them. And I know that the scholars would look at the specimens with delight. Children have a natural curiosity for such things, and they would mentally devour the geological maps—I mean such as have studied geography. Apart from the geological knowledge acquired, they would soon know the geography of our state and country far better than before. These subjects would be especially welcome in the purely country schools where the stones and the strata are daily before their eyes and in their hands. Glass-doored cases with lock and key to secure the specimens, should be had in the schools, and naturally additions would be made in every neighborhood. Common stones are more important to be understood than rare ones. All the metallic ores should be in every cabinet.

2. *Chemistry.*—The composition of the minerals runs at once into chemistry; and minerals are beautiful illustrations of chemistry. All the metallic ores of our state—iron, copper, zinc, lead, nickel, besides many other minerals, are definite chemical com-

binations. There is a wrong impression that the operations of chemistry are difficult to perform. Nothing in the world is easier, as I have shown in my Eighth Paper to the *Evening Bulletin*. The same wrong impression is common about the expense of chemical apparatus, which in reality may be simple and cheap.

3. *Natural Philosophy.*—The same is true about natural philosophy. The great mass of its more important truths are easy both to teach and to learn; and from my long experience in bringing these sciences to the comprehension of children, I could simplify the apparatus and the illustrations. Our manufacturing chemists could put up boxes of assorted chemicals cheaper and better than those of Canada, and our Philadelphia instrument makers could excel theirs. All that is necessary is to give them definite directions what to make, and to allow each one to bid his lowest for getting the jobs.

4. *Astronomy.*—I invented and had constructed my own astronomical illustrations, consisting of planetarium, tellurian and diagrams. They bring the chief truths about our solar system easily to the understandings of the children, and they may be made in larger quantities with little expense.

5. *Botany.*—The chief illustrations are drawings and the living plants. There are very few practical botanists; but I think I could do much to diffuse a knowledge of this study through our State. Herewith I send you a circular of my lectures of last spring and summer and autumn. My class of adults has been *sustained longer* and *attended better* than any other public class ever attempted in America.

6. *Zoology.*—Herewith I send you a little zoological chart, hastily prepared eighteen years ago. I could make a longer one—say a yard in length—to be hung up in every school-room for, at most, $1.00 each. You will perceive how plainly it shows that all animals are divided into four great departments, and these into thirteen classes, and the latter again into about 100 orders. All the definitions are as easily to be understood as anything can be. All animals around us from the smallest and humblest to the highest, along with pictures of all others, can be taken for illustrations, and children are pleased to see how all animals are naturally related together.

7. *Anatomy and Physiology.*—These sciences I have been accustomed to teach only in their general outlines. I am satisfied that they are not so well adapted to children as the other previously named sciences. Children do not wish to look into our interiors; this is repulsive and disagreeable to them. They want external objects to see and to handle. For these two sciences books and drawings are sufficient. But any carefully cleaned bone can be made more or less interesting.

8. *Meteorology* is best taught along with physical geography and natural philosophy.

These remarks about the many natural sciences show that they alone are sufficient for an object lesson the last half hour of every day, without making collections of objects of the fine arts, as our Ontario neighbors have done. Statues and pictures are very good in connection with the art of drawing; but we may leave them out a few years in the beginning, until in our own state we get fairly under way with the many natural sciences and their applications to the arts and to agriculture.

The sciences should be taught with constant reference to the industrial arts and to agriculture; and to the latter especially in the country. The next generation of farmers would then be able to read a book on agricultural chemistry and botany with profit and pleasure, which they cannot do now. By these practical applications the people would the more readily learn to appreciate the value of the natural sciences.

These sciences should never be learned as tasks out of books. They should be taught, as I have taught them more than thirty years, orally, with some object to look at during what is otherwise the last very weary half-hour of the day. The whole school may be made happy then. After looking and listening the child naturally desires to read and study out of a book by himself what he has seen and heard. Every day a short examination should be held about the lectures of the previous days.

There are two difficulties in the way of this scientific object teaching. The first is the want of suitable scientific objects, and the second is the want of scientific knowledge in the teachers. But scientific objects, philosophical apparatus and specimens of natural history we can easily procure, and at a cheap rate, IF WE TRY. One man alone in Ontario—Dr. Ryerson—originated and carried forward that magnificent movement which supplied Canada with apparatus and objects. The Normal Schools must prepare the teachers.

THE PITTSBURGH MEDAL AND DIPLOMA.

FRIDAY evening December 28, was fixed upon as the time for the presentation of the Medal and Diploma awarded to the Board of Public Education of the city of Pittsburgh by the Centennial Commission. We take the following account of the ceremonies from the *Commercial-Gazette*:

The hall of the High School was crowded last night by a large audience, the occasion of which was the presentation to the public schools of this city of the medal awarded to them by the Centennial Commission for the finest display of pupils' work last year at the Centennial Exhibition. Mr. John Wilson, member of the Central Board from the South school district, second ward, presided. The space in front of the stage was very handsomely decorated with evergreens. Forty pupils, representing the various school districts of the city, occupied seats on the stage. Judging from the garments worn by them, they also represented all the grades of society, from the laboring man to the heavy owner of government bonds payable in gold and silver, thus illustrating that the benefits of the common school system are enjoyed by rich and poor alike.

The presentation address was made by Hon. J. P. Wickersham, State Superintendent of Public Instruction. He stated that he was glad he had been selected for the honor of bringing to the schools of Pittsburgh the medal and diploma which they had so worthily won. He had watched the growth of the Pittsburgh schools for the last ten years, and was glad to see them assume a position among the best in this or any other country. In the educational department of the Centennial Exhibition the display made by Pennsylvania was the best, and that of Pittsburgh was excelled by none. Distinguished foreigners, in writing of the schools of Pennsylvania, had referred to them in terms of the highest praise, and he was glad to say that in the size and quality of her exhibit

Pittsburgh was at the head of the schools of the Commonwealth. It added greatly to the value of the medal to know that chief among the judges that awarded it was Sir Charles Reed, of England, and that his associates were scarcely less distinguished in the world of education. Dr. Wickersham's address was very appropriate, and elicited marks of hearty approbation.

Mr. Samuel Harper, of the Central Board of Education, received the medal and diploma in behalf of the people of the city of Pittsburgh, and said that the occasion of their presentation was the result of diligent and zealous labor during the years in which the public school system has been fostered in this city. To those by whom this result has been wrought, State Superintendent Wickersham, City Superintendent Luckey, the corps of city teachers, the various boards of education, the pupils, and last but not by any means least, the people of Pittsburgh, he paid the highest meed of praise. The system of free schools took early root in this city, and no community since then has exhibited more devotion to its maintenance and progress. The people have always held up the hands of the boards of education, and with urgent encouragement carried them on in their progressive measures. They appreciate the fact that progress is an inherent quality of a public school system. They cultivated the germ that was planted when the education of the poor was provided for, until the germ became a stately plant under the name of the common school system; and still they cultivated it until the plant had become fully matured, and the establishment of the High School celebrated its nativity. Public sentiment in regard to more thorough public education has advanced with prodigious strides. In Pennsylvania the advance has been so marked that the poor and common school systems have entirely disappeared at the bidding of the sovereign people who, in their stead, have by the State Constitution of 1873, provided for the establishment of a "thorough and efficient system of public schools."

Mr. Harper was followed by Mr. W. C. Moreland, whom Chairman Wilson introduced as a graduate of the common schools of Pittsburgh. The speaker said that his surprise at being invited to make an address on this occasion was only equaled by his surprise that he had the courage to accept it. Mr. Moreland's well-known eloquence gained for him the closest attention, and as he portrayed in glowing words the progress of this country under its system of common schools, and painted its future if these schools should be fostered, protected and developed, the deep interest that he created was evidenced by the silence that pervaded the room.

The Right Rev. Bishop Kerfoot said that he had not appreciated to its full extent the honor that had been conferred upon Pittsburgh in the presentation of the medal and diploma until he had heard the remarks of Mr. Wickersham. Then he proceeded to descant upon the practical advantages that accrue to both men and women from education, and argued in favor of higher education in the common schools. To illustrate his meaning he said that education would enable the boy who would otherwise be a hod carrier to become a master mason; under its developing influence a builder or an architect would be made of the man who could otherwise do nothing more than use the saw or plane. It would change and elevate the forms of labor, and in countless ways redound to public and private good. Mental labor is frequently more severe than manual labor, but it is better in that it unfolds and strengthens the mind, and renders it vigorous and active. He spoke for both sexes, and said that they would be equally benefited by advanced education. It is easy to determine upon entering a dwelling, by its internal arrangement, whether it contains a woman of cultivated intelligence. Applied chemistry can be turned to advantage even in the making of bread. No matter how hospitable a woman may be, or how freely she may place before a guest the precious contents of her larder, if she be ignorant and uneducated her table will not look so well nor so inviting as the table of the woman familiar with applied chemistry. Education fits woman for a better performance of her household duties, as well as enables men to cope to better advantage with the world. In conclusion, the Bishop said that although shame and disgrace had been brought upon Pittsburgh by the riots of July, she now has, in this medal and diploma, something with which to offset the disgrace.

Rev. S. J. Wilson, D. D., paid a very high tribute to the common schools of the United States, which more than anything else distinguishes this country from other countries. He also advocated advanced education for the masses as essential to the preservation of political and religious liberty. This country has celebrated its hundredth anniversary, and if it would celebrate its second centennial its system of common schools must be encouraged and developed. Like the preceding speaker he pleaded for greater educational privileges for woman, and asked whether Roman or Grecian literature shows a letter written by a woman. In the height of civilization in those countries the education of the masses was neglected, and but comparatively few reached eminence. Dr. Wilson said that in view of the educational honor this State and Pittsburgh had gained, he was proud of being a Pennsylvanian, and especially proud of being a Western Pennsylvanian. Upon the conclusion of his address, and after a performance on the piano by Miss Atkinson, the audience was dismissed.

THE CLASSICS IN THE COMMON SCHOOLS.

THE following argument has been made by Mr. Amos Myers, of Massachusetts, in the Springfield *Republican*, against the study of Latin and Greek in the common schools:

1. There are twenty times as many persons instructed in Latin and Greek as can ever use these languages. Our system gluts and oversupplies the market, so that nineteen out of every twenty are financially worse off than if they had not been lured by the cheapness and great prizes which they fancy only within the reach of those who know Greek.

2. Free classical education is a failure as a matter of culture. To offer it as it is now done to all, without reference to their taste or future prospects, is the same as to throw pearls before swine. In Newburyport, Salem, Haverhill, etc., there are from sixty to one hundred boys and girls studying Latin, and half that number studying Greek. But of all these not more than two or three persist unto the end. A class of fifty begins but dwindles to five or six. The remaining eighty-five per cent. have abandoned forever

the "humanities" over which they have lost the best part of two or three years. *Lost*, I say, because as a matter of *culture* it would have been infinitely better to have expended the hours devoted to Greek and Latin, to Latin alone, or to French. A smattering of Latin is of some service, but a smattering of Greek is as useless as phrenology.

3. Classical education is a failure used as a discipline when carried too far; and to impose it on all, whether they have aptitude or not, is carrying it too far.

4. By offering Greek to every one, you induce many more to study it than otherwise would. It draws off attention from natural philosophy, chemistry and botany, by taking time that would otherwise be devoted to them.

5. It is, too, pernicious business, because it contributes nothing at all to the industrial faculty or power of dealing with the concrete. It draws annually from industry and business thousands of boys, confines them for four years more in high schools until their physical constitution and energy is measurably impaired. He who at fourteen could have left school with a knowledge of grammar, reading, writing, geography and arithmetic sufficient for doing the business of an Astor or Stewart, is retained in school till eighteen and crammed with Latin, Greek, geometry, algebra, etc., when he comes out habituated to a sedentary employment and enfeebled bodily by it—with no taste for business or activity of any kind; with supercilious importance frequently; too old to begin at the bottom round of the ladder in a factory or store with boys three or four years his junior, and too inactive to compete with them, and too ignorant to begin higher up. Now when you find nearly all the business talent and money-making men to be men without the high school culture, and find the high school graduates filling some subordinate positions as clerks or book-keepers, you have a right to presume that there has been a loss of energy, or physical vigor, and of business capacity, brought about by those four years of confinement over books. It seems to be this which has rendered Massachusetts such an excellent place to emigrate from. Boys are too old to begin here; they have been anticipated by lads who have entered business walks while they were plodding over Greek, Latin and algebra. Society needs to be protected against the mistaken ambition of parents who imagine that they are doing a kindness to their boys by confining them in high schools, when in reality they are enfeebling their constitutions, stretching their tastes beyond possibility of gratification and thus unfitting them mentally and physically for those hard lines which they in the course of nature must follow.

6. It is a delusion to suppose that clasical education is essential to high position, or even characteristic of eminent ability. It is a luxury. The inculcating of the principles of mechanics, of natural philosophy, of chemistry, has done more in the last century for advancement in true knowledge, polite living and just government, than a thousand years of Greek and Latin. In the name of the hundreds of young lawyers who are destined to be poor all their days because they have made the mistake of dwelling among the tombs of languages instead of the marts of trade, I protest against the fossil crucible into which Horace Mann's scheme of education is casting every ambitious young man, and in which it is now proposed to immerse the young women.

7. It seems to me that the remedy for this lies within our system, if school committees could be found resolute enough to carry it out. Begin the linguistic course with French and German. If more is wanted let these be followed by Latin, and that by Greek. But advance no one to Latin who cannot first read and translate a page a minute of French or German. Begin with the nineteenth century and work back, not at the first century B. C., and work down. The same reasoning which puts Latin before Greek should put French or German before Latin.

8. But if it be found that school committee men cannot face the current foolishness and dry-as-dust prejudice for things fossil and antique—if science *must* be shut out of our schools, and mediæval education be persisted in—then it would be better to abolish high schools altogether and rely on academies. Costliness is a poor check, but it is better than none at all. Better than having our young men by scores descend to premature graves, broken in health and baffled of success by an unsuitable education—64,000 more women than men, and the disproportion constantly increasing, emigration of males and immigration of females caused by false systems of industry and education—all those facts show more than labored argument that we change or perish.

I trust that I am not forgetful of the great debt we owe the ancients, but we have derived the best we ever shall from them. Further mining in that field should be the work of specialists. The present hour is so pregnant with principles, so stocked with phenomena and so rich in raw material, that we should try to express its meaning and imbibe its lessons. France and Germany can tell us more now than Greece and Rome. Science calls on us with piquant intrusiveness to unlearn our old traditions in mythology and tradition, and unless we do it, we shall perpetuate the race of learned fools and make but halting progress in material prosperity.

TEACHING ENGLISH TO GERMAN CHILDREN.

THE Superintendent of Berks has published a pamphlet, for circulation in his county, containing a "Course of Study for Ungraded Schools," and "Suggestions on Teaching German Children the English Language." We copy the latter in full, believing that the suggestions will prove valuable in our German counties generally:

SUGGESTIONS ON TEACHING ENGLISH.

Before throwing out any suggestions on this point, we must refer to two theories prevalent in many parts of our German counties. The first is, that the children should begin with the German, and, after having made some progress in that language, they should be transferred to the English. The second is, that they should begin with the English, and, by formal translations from that language into the German, they should acquire the English. Both these theories are wrong. That the first is wrong is evident, for as long as the child learns German only it learns no English. To the second we offer these objections: in formal translations the child frequently knows as little of the German phraseology of the sentence as it did of the English. And if it does understand the sentence either in part or whole, it does not get the necessary practice in using the English. There are two things

necessary in any method that will be satisfactory. First, it must be natural; that is, the pupil must learn from a living instructor, just as the child learns its first words and sentences from the lips of its mother; and, second, it must be practical, and practical in the sense that it affords the pupil a constant exercise in the English already acquired. We learn to read by practicing reading, and we can only learn to speak by practicing speaking.

It is out of place here to discuss methods in their detail. The teacher must in every case develop his own plans according to the wants of the pupil. At no time, however, must this idea be lost sight of, that we learn a thing by doing it. If the child has mastered but three sentences of English, so far its conversation and drills should be in that language. *The English must be used in school and out of it*, as far as the pupil is able. The German has its place, and will receive no injustice by such a course.

In order that our suggestions on this point may be better understood, we will set them forth under the different grades existing in the schools. We take the reading-classes as the basis of our grades, beginning with the Primer and ending with the Fourth Reader.

First Grade.—When the teacher gives his first lesson in the alphabet, he should also give a lesson in language. The child must begin with the names of objects and the meaning of words. It should learn the names of objects in the school-room, as *book*, *desk*, *stove*, etc. The first words usually taught from the chart or board, are *ox*, *cow*, *dog*, etc. The meaning of these should be taught even before the child can either pronounce or spell them. Here a knowledge of the German is important.

Second Grade.—In the First Reader, object lessons should be continued. More than the mere names should now be required. There should be conversation about their qualities and uses. Take, for instance, the dog. A great variety of questions can be asked about him. An excellent conversational exercise is afforded by means of the pictures illustrating the lessons. These not only afford a drill in speaking, but are a most excellent means to teach the substance of the lesson. The child can only learn to read correctly when it understands what it reads.

Third Grade.—Object lessons of an advanced grade, should now be given: the names of the qualities, as well as of color and form, should be taught. Along with talks on objects the idea of the sentence should be taught. These exercises should be oral and written, and much stress should be laid upon them. They are the beginning of both grammar and composition. The use of capitals and pauses can, in this way, be taught with comparative ease.

The contents of lessons should be taught as before, from pictures, and by questions and answers.

The meaning of words should be taught orally, by using them in sentences, and no pupil should be advanced from this or any other grade until he knows the meaning of all the words, and can give the substance of the lessons read in reply to proper questions.

Fourth Grade.—Here object lessons should be given a still wider range, and should be accompanied by oral exercises on general information, geography, and history. Reading lessons should be reproduced by means of questions and answers, both oral and written. The reproducing of lessons and of short narratives forms an excellent exercise in composition.

Grammar proper, of a synthetic character, should now be begun. The meaning of words should be taught by incorporating them into sentences, and by committing definitions. Lists of words should be selected from the different lessons for such exercises, and the pupils should be taught to use the dictionary.

Special drills should all along be given on idiomatic English. Expressions like "make the door shut," "I have it so in my head" and "leave me see," should be promptly corrected.

Fifth Grade.—Object lessons should be continued with the view of teaching along with language the elements of the sciences. The meaning of words should be taught by formal definitions and etymology. If necessary, reading lessons should be reproduced orally and written. Special attention should be given to synthetic language. All grammar should be of this nature. The pupil having commenced the study of German in the preceding grade, will now be able to translate from that language into the English. This forms a most valuable exercise. There should now also be original composition and letter-writing. There may also be special drills, as, for instance, on words that are both spelled and pronounced alike, or nearly so, in the two languages. Such exercises will prove both interesting and beneficial. The study of geography and history should receive special attention; both from the fact that they furnish an exercise in language and also because they supply the mind with facts and cultivate a taste for general reading so much needed by the pupils. Indeed, every recitation, be it reading or arithmetic, must be made a language exercise. The course of study must be so arranged, and both teacher and pupil must feel that language is the one thing needful.

The subject of pronunciation must not be forgotten. Drill in elementary sounds, and phonetic spelling should be frequent. In fact, every recitation should be a drill in pronunciation, as well as in language. At times it will be necessary not only to divide words into syllables, and syllables into sounds, but even sounds will have to be subdivided to enable the pupil to master them. But by well-directed drills and by repeated drills from the first lesson through the entire course, there are very few who cannot master all the difficult sounds, and learn to speak the English readily and smoothly.

TEACHERS' INSTITUTES.

A SCRAP OF HISTORY.

BELOW we publish an article from the West Chester *Local News*, giving an account of the first teachers' institute in that county. Dr. Burrowes and the writer were both present and delivered addresses. The "two hundred dollar law" was first obtained as claimed as a special law for Chester county; subsequently, it was extended to several other counties, and, finally, in 1867, it was made general. The first teachers' institute in Chester county has therefore an interest for the whole state. It was not however by any means the first assemblage of the kind within our borders.

FIRST INSTITUTE IN CHESTER COUNTY.

Mr. Editor: It may be of interest to your readers at the present day, to have a brief account of how the first Teachers' Institute in this county was gotten up and conducted without the aid of law or official aid from any source.

You will permit a slight digression to get at the bottom of the matter. In the summer of 1853, or about that date, the late Dr. Darlington proposed to give a few conversational lectures, once a week, to a small party who took an interest in botany; we met for the purpose in a summer house in the shady grove of Dr. Ranners, now the property of Col. Guss. These lectures were continued during the summer, and had a tendency to draw out the sympathies of the parties toward each other, and unite them more firmly in the cause of popular education.

In the autumn of that year the writer of this received an invitation to meet some literary friends at the library of Mr. Darlington in the evening, and there found principally the same parties who had enjoyed the Doctor's lectures in the grove. The matter of conversation turned on the point—how to get the teachers of the county together and compare opinions on the best methods of teaching, and we finally agreed on a Teachers' Institute.

It was suggested that lecturers from abroad would come and spend a week with us if their expenses were paid. A committee was appointed to conduct the correspondence and we adjourned and met from time to time until we received favorable answers enough to warrant the attempt. We consulted with the county commissioners and got a grant of the court house for the purpose of holding the Institute. We then canvassed the town to provide boarding and lodging for the teachers gratuitously, and raise money to pay the lecturers' traveling expenses. Some families would take one teacher, some two, others four, and some money was subscribed to pay the lecturers' expenses. By this time spring was approaching, and the second Monday in April was fixed upon for opening the Institute, full notice of which was given through the papers, without charge.

On the morning of the opening day, we were met by an unseasonable, drifting snow that had fallen the night previous and blocked up all the roads. We met at ten o'clock and organized with the writer of this as President, and Mr. Sanford Culver, Secretary and Treasurer. There were less than twenty in attendance and we adjourned until afternoon. Some of the lecturers arrived at noon, and a respectable number of teachers and others attended.

At the opening of each session, the lecturers agreed upon a programme for that session, each one to occupy thirty minutes at a time, and the chair kept them strictly to the time, as there were just so many half hours a session. One was not permitted to encroach on the time of another. There was a popular lecture each evening and a general invitation given. After the first session the house was well filled all the time. As the teachers arrived, the Secretary directed each one where to go to find a home for the week. At the end of the closing lecture on Friday evening, there was a general handshaking and congratulation; everybody seemed pleased and wanted more of it. It was a success.

How the two-hundred dollar law was gotten up.—The same little coterie, consisting, as far as I can recollect, of Dr. Darlington, the late Mr. Wyers, Rev. Mr. Moore, now Dr. Moore, Mr. Culver, then principal teacher in our schools, and Alexander Marshall, then a member of the school board, met at the Doctor's library again to devise means by which the Institute might be annually repeated. We estimated that two hundred dollars in cash would run it, and drew up a bill accordingly, to be paid out of the county treasury, and that the coming County Superintendent, not yet elected, should hold such Institutes annually and draw the money from the county. This bill was sent to our Representatives and Senators at Harrisburg, and passed into a law. As it was a special law, it was subject to a tax; this tax we raised out of our own pockets and sent to Harrisburg.

EDUCATION IN CONGRESS.

WE copy the following article from a late number of *Harpers' Weekly*. It discusses a live question, and one of which we shall hear much in the near future. In addition to the two bills mentioned in the text, there are several others which have been offered in the House. We are not prepared to speak of details, but we are in favor of the establishment of a national fund for educational purposes:

Two bills have been introduced into the Senate designed to aid the progress of education in the less cultivated portions of the Union. The plan suggested by Mr. Hoar is to set apart the proceeds of the sales of the public lands, the net proceeds of patents, the moneys repaid by railroads, as a fund to support schools in all the States and Territories. For ten years the distribution of this fund is to be regulated according to the ratio of illiteracy, the States having the largest uneducated population receiving the largest share of the money. Mr. Morrill's bill is not dissimilar, except that it is confined to the proceeds of the public lands. Both are measures of real importance, and worthy of the attention and the support of all the community. Education is now admitted by all to be the foundation of good government, the only cure for many political and social evils, the commencement of that national progress which may at last bring the vast majority of every people to ease, comfort, and content.

There is no real obstacle in the way of general good order in any community except ignorance; there is no cure for national degradation and decay so certain as to begin by teaching the children.

No doubt this immense engine of public improvement, the common school, is only in its infancy. We have scarcely yet begun to understand the true modes of education, the power which we possess of preventing future evil, and of softening the tendencies of a whole community. As yet we are content to make the schools teachers of elementary knowledge, of cleanliness and order, of at least the lower principles of civilization. It is not a great deal that the child can learn in our crowded school-houses in the city or in the less comfortable buildings in the country districts. He gets the foundation of an education and the means of future self-improvement; he is not as yet taught a trade, an art, an occupation; he is not raised above beggary by learning some useful employment; he is not taught that the man of labor should also be the man of thought. Yet even in its infancy, imperfect, often carelessly administered,

sometimes even thwarted and opposed by its own advocates, the common-school system has plainly done more for freedom, religion, good order, morality, than any other political instrument. Prisons fail to prevent crime; the common schools at once diminish it. Almshouses are filled with those who have had no education. The very ignorant are the chief burden of society. Nor can one enter any of these populous school-houses in the city, where hundreds of children taken from all classes of society are taught at once good order, neatness, obedience to fixed rules, politeness, humanity, besides reading and writing, without feeling the value of the system and the latent powers it must yet unfold.

It is the design of the two bills before the Senate to extend these advantages to all the children of the nation. The gifts seem so guarded by proper restrictions that they can not, as has sometimes happened, be misappropriated by the officials of the States and Territories, and they may at least prove to the people that our national government is not indifferent to the cause of education. It is worthy of notice, however, that ours is the only government which assumes no direct interference in educational affairs. It has granted large sums at times to the different States and Territories for their public schools, agricultural and other colleges, but has never yet apparently controlled the disposition of the fund or held it in its own hands. Our government alone has refused to assume the duty of educating its people. Germany for sixty years has pursued this aim with ceaseless liberality; Scandinavia is thoroughly educated; France has an imperfect system of public instruction; the Italian government has begun to teach the Italians; the English Government since 1870 has compelled all parents to send their children to the schools. But with us a large part of our country is left in intense ignorance, and we may be easily outstripped in educational matters by European kingdoms who have followed and may at last surpass us. No patriotic citizen can reflect without a sense of shame that the national schools of Ireland penetrate to every remote impoverished district to offer a valuable education to all, that the Danish and Swedish governments have scarcely a single illiterate person in all their land, that republican France and reviving Italy are eager to imitate them, that even England will soon be an educated country, but that we, the leaders of republicanism, have an illiterate population almost equal in proportion to that of France. In Germany hardly a person can be found who can not read and write. In the United States five millions of illiterates over ten years of age threaten the ruin of freedom.

Every measure tending to remove this danger is worthy of the support of all good citizens. The question of education must become the leading one of our future history, and it is one before which all the strife of parties may well be silenced, on which intelligent persons of all creeds and opinions may find at last a common ground of union. In the presence of the child angry passions may well be stilled. Before the interests of the children of the nation, who will venture to be governed by the lower instincts of party, by the rage of controversy, the fires of sectional antagonism? Certainly no wise man. From nearly every part of the Union a great host of children are calling to us for aid. Abandoned waifs, they are growing up in grossness and brutality, with scarcely more knowledge of the world they live in than the savage Indian, the Malay, or the Bushman. There are several millions of them. They are to become the ruling power in different sections of the country, and on their votes will rest the questions of national honesty and honor, of frugality and pure republicanism, of peace or war, of the lust of conquest, the horrid barbarities of border strife, and the safety of all that property in money, lands, arts, manufactures, mines, which has been accumulated by the intelligence and industry of the educated members of the community.

It is in self-protection that England and France have pressed on their schemes of education; to escape future perils they are willing to make great sacrifices in the present. And with us the danger is still more pressing than in any other country, and hence the sooner some plan is formed for getting rid of this great mass of illiteracy, the less costly and troublesome will be its execution. Mr. Hoar's bill proposes a remedy that will certainly in part prove effective, will supply the least educated aud most impoverished States with a considerable education fund, and even without the "net proceeds of the patent-office," which seem properly to belong to inventors, must create an interest in public instruction in districts where it has been almost wholly unknown. At least the discussion of the question will serve to bring it before the nation, and on none could the national intellect be so well employed. It would be a graceful act on the part of the best men of all sections of the country to unite in treating this subject as one above party, a sacred duty which every one owes to the children, to posterity, to freedom. Could we but arouse the higher instincts that lie hidden in the people, how easily might every political question be solved for the true benefit of all! This is what every friend of education desires to do. Millions of uneducated children are calling for help, and if Mr. Hoar's or Mr. Morrill's bill shall serve to make their voices heard, it will be of signal value.

FEEBLE-MINDED CHILDREN.

PENNSYLVANIA TRAINING SCHOOL.

WE take the following account of the Pennsylvania Training School from the Twenty-fifth Annual Report. It contains some valuable lessons for teachers:

This in its concrete shape, is a cluster of granite buildings, located on a beautiful and wooded eminence west of the Philadelphia and West Chester Railroad, between Media and Greenwood stations, and within a short walk of the latter.

The locality is famous for the healthfulness of its air and water, and the peculiar beauty of its broken landscape. A cheerful painting has been known to exercise a silent, constant influence for good on the disturbed mind of an insane patient, inducing the happiest results of change and cure; and it is not imaginary that the picture, spreading forever before our windows, at last steals through even the duller senses of imbecility; more than one poor boy having awakened to the recognition of the tints and glories of sunrise, or the placid beauty of hill and valley which surround this home.

The immediate hill on which the main buildings are erected is terraced, graded with dry walks and planted with shrubbery. A grove of five acres, on the west and north, is laid out for paths and drives, where, in summer, the children have coolness, freedom and exercise. Perhaps in strolling through it,

we shall meet a group of little children about a donkey and cart, or the omnibus with its load of helpless ones. A farm of nearly one hundred acres extends into a valley below, furnishing work for such boys as can be taught farm labor, and broad bounds for sixty or eighty lads who can be trusted with this range.

And it may here be said that it is the experience of this institution that the higher grade of children received by us require much liberty, under *slight* supervision. This is sometimes attended with disadvantages and risks, as when a boy "breaks his honor" and absconds, or roams about the country in near vicinity, troubling the neighbors, and filling us with apprehension; but so early as can be, and to as great extent as is safe, after securing the confidence and love of a feeble-minded boy, he should have the privilege of "broad acres," and be allowed to discover, if he will, and what he often does—

> "Tongues in trees, books in running brooks,
> Sermons in stones, and good in everything."

We have carefully estimated the anxieties and disorders arising from this freedom, and have balanced them with the happiness, independence and self-development of such freedom, and see that the result is in favor of this liberty. Its withdrawal becomes a severe penalty for grave offenses.

There are sufficient play or day-rooms, to continue the classification of the school-family into six distinct groups based on age, habits and intelligence. Large airy school and dining-rooms, and two large drill or exercise-halls, occupy the remainder of the central main building.

In the rear is a nursery for the care of thirty delicate and helpless children, who have little or no contact with the school department, and a new and spacious building, 59x80, and of three stories height, separate still more exclusively a number of asylum or hospital cases. This is only temporarily so occupied; when the asylum buildings, as contemplated in the devise of the late John M. Sharpless, shall be erected, as I trust they will be on adjacent lands, and at no distant day, this "North Home" will be legitimately occupied by a large group of youth, who can be intelligently trained in certain trades and occupations.

A farm class of six boys have the home and training of the gardener's house, located on the north-east border of the farm; the great rude innocent boys, milk the cows, work in the gardens, do very clumsily, chores about the house, and on rainy days dispute "who shall tend the baby" of the gardener's family.

The laundry buildings, adjacent to the south or girls' department, are occupied by a laundry class of girls, for whom, by this separateness, the domestic order of a small family is secured.

At 7 A. M. the children are in the dining-rooms and are finishing their breakfasts; there is a low murmur of voices, just so much talk being permitted as will give normal rest in eating and divert from gluttony, and yet not amount to disorder. Neat and kindly-appearing attendants are at each table, and presiding over the whole is Miss Lobb, our senior teacher, who had met the children half an hour since in the play rooms, where the day had been opened with the "good morning" and the kindly inquiries of a rightly-behaved family. But the solicitous mother if shown in the dining-rooms at this time, would see only empty plates and doubtful remains, so that her curiosity shall be gratified by a glance at a bill of fare prepared by Miss Steele, the housekeeper, and laid daily before the superintendent.

The meal finished, napkins folded, and the chairs placed, the girls and boys are dismissed this morning, September 29th, 1877, in the following order:

	Boys	Girls		Boys	Girls
To work of Dining Rooms.		14	To Sewing Room, etc.,	1	3
" Work of Dormitories,	19	21	" Shoe Shop,		4
" Work of Basement Cleanings,	6		" Carpenter Shop,		2
" Sweeping Pavements,	10		" Boilers,		1
" the Kitchens,	8	2	" Farm and Garden,	10	
" Laundry,	4	10	" Stables,		2
			" Road Making and Grading.	25	
			" Out-of-door walking,	15	10

I need not apologize in this day for nominating so many children to actual employment, nor explain that the work is more for "work's sake," than for its profit to the institution; neither illustrate by anecdote, how, step by step, helpless and useless and unhappy creatures, become happy and helpful, through a little patient teaching in light and useful employment. I only regret that so many are entirely and necessarily omitted from the above appointments, because of their infirmities or inability. But we need not follow these various classes; suffice it to say that the teachers and attendants are constantly reporting increasing aptitudes of this or that child for work, or in others, the fading out under this influence, of mental and physical torpor, or disagreeable habits.

THE 8:40 BELL STRIKES,

And at once there is a great stir through the corridors, of preparation for schools. At 9:20 long lines of children form for the matron's inspection; here and there a little pocket has been turned inside out, or perhaps a collection of buttons, strings, rags, and pill boxes, has been lifted by an appeal to the generosity of the members, for a notion prevails among the teachers that these odds and ends prevent any teaching so long as held by their pupils; that the senses of hearing and seeing are almost suspended: while the child experiences the delicious enjoyment of the sense of tact, as his fingers automatically clutch or glide moothly over the bit of china or old spool. The teacher has facts to corroborate this statement.

The inspection has adjusted collars, and shoe. strings, and discarded two or three luckless pairs of panta oons and their disgraced owners, when under the convincement that (as little Anna says,) "every body looks nicely, because Mrs. Clapp has said so," they pass on to the "Keystone Hall" to engage in

EXERCISES PREPARATORY FOR SCHOOL;

Which consist of recitation, in concert, of the Lord's Prayer, or a portion of Scripture; singing two or more songs; a short general exercise in Phonetics, to aid the speech of those who speak, and to inspire the desire to speak of those who are mute; then a prompt and responsive movement exercise, closing, mayhap, with clapping of hands, cheering and marching off by divisions to the school-rooms. These opening exercises must be bright, kindly and responsive, to accomplish which, a great deal depends on the enlivening music; more on the strength, tone and enthusiasm of the leading teacher; without such bright beginning the day is likely to be a dull one.

THE SCHOOL-ROOMS.

We enter first—

No. 1. Training Class. The appearance of the sixteen children here assembled, as they listlessly

wait the trainer's movements, is not such as to encourage one with much or any hope for their improvement, but as beads are placed before one, building blocks, or peg-boards, or boxes of pewter sand with spoons and little buckets, or scissors and paper to others, a marked change comes over the faces, as the fingers get to work, some clumsily, some sensitively and fearfully, as though being scorched; a few definitely and deftly, which nominates the child soon to an advance in the school. The operations in this room, whether slow or swift, clumsy or adroit, are indexical to the idea of the institution, viz.: *the training of the hand as the means of developing the intelligence.*

But it is not long before the tables are cleared, a few minutes of orderly silence, a lunch of gingerbread, less for the need of it than for its pleasure as a reward, and the classes move out to the Gymnasium, to engage in patient exercises, to train the muscles of walking to act co-ordinately with those of other sets, to combine the sense-perception and movement, in the action of balancing cups of water in the hands, while stepping over obstructions, &c., &c. The gymnasium, graduating its exercise, from the simplest forms of activity, up to complex dumb-bell and other exercises, becomes a recess room, at intervals, to all the schools, and the necessity for this is very obvious in the existence of so much irregularity of structure and bodily movement, requiring change from the cramped and sitting posture of the school forms, to the ladders, back-boards, swings and marchings of the Calisthenium, where again the hand and foot, by the practice of grasping, precision and co-ordination, are leading the brain more actively, perhaps, than blackboards and books.

Leaving the Training Class in a noisy frolic in the gymnasium, we pass through a series of school-rooms, separated from each other by glass partitions, and stocked with many things to aid in object training, sense-perception, and hand-occupation.

[The course of study in the more advanced classes of a Training School for the Feeble-Minded is quite similar to that of the classes in other schools, although the lessons are shorter, more fully explained, and very much more carefully illustrated. The teachers are compelled to make use of the system of teaching with objects; and they are also compelled to develop each subject in a series of connected steps or in an order strictly logical.]

EXAMPLES.

The following cases reported by the teachers will illustrate the kind of work done at Media:

Ella came three years ago, perfectly mute but hearing well; she was exceedingly shy, if possible running at the approach of any one, but finding no way of escape would cover her face with her hands. It seemed almost hopeless to attempt teaching her anything, but time and kindly patience have well-nigh conquered her greatest drawback—her timidity. In the training class she presents a happy face, and enjoys the use of nail and form boards, and building blocks; she also strings beads rapidly. She does not attempt speech yet, but has a peculiar sound to attract attention, and makes herself understood by signs.

Willie entered the institution a semi-mute, afflicted with twitching of facial muscles; knew his A B C's, and had some idea of drawing, and was generally obedient. After a term of less than three years with us, during which time he has been absent twice for some months, he has learned to speak clearly, is quiet and composed in manner and muscle, showing only a slight nervousness at times; can read and spell very well; writes a good letter without assistance, in a good round, distinct hand; sings, marches, and drills in perfect time, and in deportment is faultless.

Annie, a very pretty little girl, came to us two years ago. She had never spoken a word, and showed no disposition to try; her hearing was perfect, though she did not seem to understand language. She was noisy and disorderly, and unwilling to use her hands. She is now quiet and obedient, ready to work, and through the phonetic training of the school exercises, is able to repeat almost any word or sound, and can give names of familiar objects. She is improving fast and promises to be a source of enjoyment to her friends, where formerly she was an annoyance, and a constant cause of anxiety.

H. B. has been with us three years. He came a semi-mute, his vocabulary containing not more than half-a-dozen words; he was exceedingly nervous, erratic, slightly choreic, and somewhat destructive, of clothing; disliked manipulation of all kind, and would, if possible, destroy work rather than do it. He now has sufficient command of language to make all his wants known, is learning to read and print, and in doing some things, uses his hands willingly, but seems to have a great aversion for others, such as the sewing-cards of the Kindergarten occupation, which he will break, tear and completely demolish with every opportunity.

Annie, at the time of her admission one year ago, was an erratic, strangely-behaving, but bright-eyed little girl of six years. She talked incessantly without any evidence of thought in her sentences, which were repeated several times in a rapid and half-articulate voice. Her mother gave this as one reason for bringing her here. At home she showed great obstinacy, and had not been sent to school on account of her uncontrollable temper, which her friends were obliged to subject by strict discipline. In this school she gradually became more quiet, and showed great interest in the exercises, applying her form-lessons to objects outside of the school-room. One morning during our walk she saw a baker's cart passing, and immediately exclaimed, "See that little oval window in the back!" A few mornings afterwards, the sun was hidden behind a cloud, and as the cloud moved from it, she again exclaimed, "See, Miss ———, the sun is right-dressing!" applying the term used in the boys' cadet drills. She has learned to print and read short sentences, as, "Is the dog black?" etc., and is one of the most interesting children in Kindergarten.

Jennie W—— came to us in '66, a semi-mute, scarcely able to walk, though seven years of age; unable to dress herself, because too impatient to learn, being of a very violent and vicious nature, often biting herself and companions and pulling their hair when in a rage, and that with the slightest and sometimes no apparent cause. There was but one redeeming feature in her—*she was very fond of lively music*—and this would often divert her from

her rage. At times her violence rendered her unfit for school, but after an absence of a few days or weeks, she would return very docile. Such occasions became less frequent, and the last year have been very few, especially in school. She can now write an easy copy, reads simple stories very nicely, is the most attentive in the division, *sings well, committing and speaking the words remarkably well;* is good in the "drills" and marching, which have wonderfully improved her gait. She is trying to sew, and though after many attempts, the stitches "won't go right," she has not shown any temper; indeed, if I know it is rising, I can now almost always help her laugh it away.

Maggie, an attractive little girl, now twelve, was placed under our care three years ago, as a semi-mute. For days it was thought by her attendants that she was unable to speak a word, and there was a singular apathy in her expression and movements. By-and-by, as she became accustomed to, and interested in her surroundings, she would repeat slowly the names of some objects; but it was several months before she would attempt to connect a sentence. She was fond of work, and happy when engaged in little domestic duties, such as making her bed and dusting the room; and while her movements were slow, she was always ambitious to do just as well as those older and more capable. Her improvement has been constant, and she is now in No. 1 division, taking an interested part in reading, writing, arithmetic, spelling and fancy work; can write a well-expressed and pleasant letter to her mother; enjoys story-books, and is able to state clearly what she has read; is rather remarkable for her ability to repeat after her teachers a long sentence, and spell all the words correctly. With care she will become a very useful girl.

Some years ago application was made for admission of Asher, by a western physician. He thus described him: "He is exceedingly repulsive; in appearance and actions more like a gorilla than a human being; he is kept in a yard or pen, where he runs about in a naked condition; every article of clothing he tears and throws to the hogs. His mental condition seems almost a blank; he has never spoken a word, and his temper is sudden and violent."

We admitted Asher and, believing him to be human, endeavored to make him realize it also; swings, ladders, etc., were used in various ways, as means of diversion and employment. At first the tearing of clothes was of daily occurrence; in the course of time he would let a week or two weeks go by without such destruction. Now he seldom tears anything, and almost never if it be in good condition, but woe to a garment, if a button be found off, or a seam ripped. He can talk well enough to be perfectly understood by any one who is accustomed to him, and will never go to bed without kneeling beside his attendant and going through his form of prayer, the language of which is incomprehensible to the bystander, but his devotion nevertheless is touching. He is very helpful in the morning, dressing the smaller and weaker boys of the Asylum with surprising rapidity and dexterity, and is as particular about their garments as about his own; he will never dress a boy in anything that has not all the buttons properly sewed on. He particularly enjoys braiding seven strands of manilla rope for mats, an exercise recently introduced for the benefit of the lower grade, or Asylum inmates.

METHOD OF TEACHING COMPOSITION WRITING.

THE Clarion county teachers published a daily paper during the sessions of their recent institute. As a specimen of its practical character, we extract the following article:

The usual method is the worst. It is about this: The teacher announces to his pupils that they must write a composition and hand it in at a certain time. If it is "handed in," it is read before the school. No instruction is given. A task is imposed for which there has been no preparation; for which no regular time has been assigned. The only impression produced is generally a hatred of composition; frequently "rebellions" of the best pupils are also results.

It is not remarkable at all that teachers who manage in this way are very decided in their opinion that it does not pay to teach composition writing. If teachers by such methods were sufficiently rebelled against to be thrust promiscuously from their school rooms, the pupils would do themselves, their schools and "composition" a righteous service. Compositions, instead of being an irregular exercise for the higher grades, should be a regular exercise for every grade. They should be *taught* in the reading classes to which, as a language drill, they properly belong. The following suggestions are equally applicable to every grade. When the higher grades write let the a-b-c-darians print.

Suppose that in any reading class, we have concluded the reading of an interesting lesson, a story, of some striking scientific facts; the teacher reviews the lesson first, by asking some pupil to give the first part of the story, another for the next, and so on, until the whole story has been pieced out. Now ask who will tell the whole story. Let some one try, and the others tell when he is done what he left out. Now ask how many think they can write out the story. All will be able to do it, because they have been prepared to do it. Let the pupils, as their next lesson, write out neatly the story thus read, drilled upon and repeated. Tell them that you will take their books while they write it, so that you may be sure that they give it from memory. Keep the books in your desk. You will be surprised to find how many have mastered, almost word for word, the story read. The compositions thus prepared are brought to the next recitation, where they are read, commented upon, criticised, etc. Now comes the teacher's part of the work. Your pupils have met your request as well as they can. They should be rewarded by having their compositions examined by the teacher, who should criticise them, and so give definite instruction.

The teacher says, "Now scholars, you have written for me some very good compositions, and I will reward you by taking them and looking them over, and wherever you have misspelled a word I will mark it 1; where you have used a capital incorrectly I will mark it 2; where you have punctuated incorrectly I will mark 3; any other errors I will mark 4. After having marked them thus I will return them to you, and you can re-write them, correcting the errors that I have pointed out. Perhaps you will not be able to correct all the errors, but do as well as you can, and I will assist you with the others. You may bring to your next recitation the copy I have marked, which

we will call the criticised copy, and also the new one which you will write, which we will call the corrected copy."

The teacher must not be too severe in his criticisms. He has not the time nor will it be best, as in such exercises the pupils are easily discouraged. At the next recitation he collects the "criticised copies." He asks one pupil to report how he corrected the first error in his; another to correct the first error in his. Let each one correct but one error at a time, so that the exercises may be distributed rapidly over the class. Drill the whole class upon the principles involved in more common errors. The teacher should, in every case, keep in his possession both copies of this and succeeding compositions, so that by comparison at the end of the term, the improvement made can be seen and exhibited to friends at the exposition. In this manner, continuous efforts at original composition can be excited or maintained, thorough instruction—the instruction most needed and most neglected in our schools. These suggestions may be varied in innumerable ways, but I would urge that no paper be written without criticism by the teacher.

REUNION.

GERMAN CHILDREN IN SCHOOLS.

Messrs. Editors: — Teachers and educational writers, who have never taught school in the rural districts, are very ignorant of the difficulties with which we in the country have to contend, and of the best mode of conducting such schools, books and other material being considered. When I went to school I learned the inconsistency of having scholars *talk* the German language, or rather, the Pennsylvania Dutch, while they study the English; the reading books, arithmetics, geographies, grammars, etc., all being English. So, when I commenced to teach, I had resolved that I would require the scholars to talk English.

Therefore, when the first two boys came in the morning talking German, I told them that we read, write and study English, and that we also want to *talk* it. As the scholars assembled one by one, this new rule was made known to them, and I soon learned that I was pushing the thing too fast, for they, being afraid they could not talk English, did not talk at all. I then talked to the sc holars of the importance of this use of English, and they seemed heartily to agree with me. The pupils and myself then made a "law" that any pupil who should talk German three times during recess must take his seat. This rule worked tolerably well; and afterwards we limited the number to two words, and finally to one, by which time every pupil delighted to talk English, with the exception of a few who had not been taught it at home and were too stubborn to comply with our rules, and consequently could not associate with the rest at noon. I found, however, that such scholars, though they can, for a time, not associate with the others, will by and by pick up, so that they can talk English at last.

In teaching children who are not taught the English at home, great care must be taken that they understand us in talking to them. I have heard a County Superintendent talk to pupils without being understood any better than if he had talked in a dead language, not because they did not understand the English, but because the words used were not simple enough. The reading matter in all our readers, arithmetics, grammars, geographies and histories, should be much more simplified for such schools. Common words and short and very simple sentences should be used.

As an example: I once talked to a class about rivers that flow rapidly, but soon discovered that some in the class were confused by the word "rapidly." They did not know its meaning, and I had to begin again and use a more simple word, at the same time teaching the meaning of the word "rapid." The phrase, "Required the cost of," etc., in our arithmetics is often not understood; but if you say, "What is the cost," they certainly understand you. "A sentence is a thought expressed in words" they can very often not understand, but when you say, "Anything that we say or write about a thing is a sentence," and then give examples, you will be understood. A teacher should never use the German language in explanations; not one word. If he commences this he will fail.

C. G. SHENK,
Director.

GOOD WORK DONE.

PROF. JACOB ENNIS, well known in scientific circles, and, for many years, principal of the "Classical and Scientific Institute," Philadelphia, gave, during last summer, an interesting series of lectures on Botany, to a class of over forty ladies and gentlemen. His lectures are not a dry form of words, to be forgotten almost as soon as heard, for living plants and flowers are supplied for each member of the class, and throughout the lecture, the audience can see what the lecturer is talking about. This has been the order for the Wednesday lesson, in the lecture hall of the Institute, at 17th and Poplar streets. Professor Ennis has been at no small pains and expense to supply rare plants for his pupils.

But even a more lively and interesting method is pursued on Saturday, when he and his class go abroad in the beautiful suburbs of the "Quaker City," and each pupil gathers herb, weed and flower, and then at intervals all make a halt under a shady tree, or an overhanging rock, and the learned professor, in his pleasant, genial manner, enlightens the ignorant.

A man of less learning would scarcely dare thus to go forth, uncertain of the puzzling questions that may be asked, and the flora that may be presented for explanation; for a goodly number of the class are doctors and teachers, men and women of culture, and some of them even schooled in scientific research. But our instructor is equal to all occasions, almost a walking cyclopedia. He manifests an especial interest in helping the *teachers* in his class, those who are not only seeking to gain knowledge for themselves, but to impart it to others.

These excursions into the country have been delightful. The society of the class has been mutually instructive; no gossip about neighbors or dress, but an earnest interchange of thought upon literature and science; and we deem it a rare privilege for any one who is constantly giving out instruction, to be able to again drink at the streams of knowledge, guided by so learned a teacher. We like the dear, good old name, Teacher. It has honored associations. The great light of this age in scientific research, used to write his name, "Louis J. R. Agassiz, *Teacher.*"

RACHEL S. WALK.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, March, 1878.

THE County Superintendents in the several counties of the State are advised to give timely notice, as required by law, for the holding of a Convention of School Directors, on the first Tuesday in May next, to elect county superintendents to serve for three years from the first Monday in June, 1878. The proper forms for giving such notice will be found on page 187 of the Digest of School Laws and Decisions for 1876.

The following directions should be observed in giving the notice:

1. The notice is to be inserted three successive weeks, in not more than two newspapers of the proper county, if so many there be; but if none are published in the county, then by printed notices sent by mail, to the secretary of the board of directors of each school district in the county.

2. The newspapers in which the notices are published must be *weekly* newspapers. There is no law for publishing them in dailies. A county superintendent can have the notices published in as many newspapers as he may see proper, provided he does it at his own expense. This Department can pay for their publication in but two. The names of these should be sent to the Department immediately after their selection, and also their publishers should be requested to transmit to the State Superintendent *marked* copies containing the notice.

3. Newspapers selected to publish the notices under the law should transmit *receipted* bills for the same directly to the Department of Public Instruction at Harrisburg, and they will be promptly paid.

SUPERINTENDENTS APPOINTED.

J. D. COOK has been commissioned County Superintendent of Montour county, in place of William Henry, deceased. His post-office address is Danville.

J. ANDREW WILT has been commissioned County Superintendent of Bradford county, in place of A. A. Keeney, deceased. His post-office address is Towanda.

OBITUARY.

AUSTIN A. KEENEY.

The following obituary notice of Superintendent Keeney has been prepared for the Bradford county papers, by Col. John A. Codding, who was a warm personal friend of the deceased:

"The angel of death has again entered a happy home, and brought sadness and mourning. A husband and friend, a dearly loved one, has been taken away.

"The death of Professor A. A. Keeney, at his residence in this place, Wednesday morning, January 23, has caused mourning and grief in our entire community. It seems to us a mysterious Providence that the good, the useful, the virtuous and pure should be first taken.

"Professor Keeney's grandparents on both sides were among the first settlers of this county. Abiel Keeney, his grandfather, was a pioneer in the Tuscarora Valley, and his strong arm helped to subdue the wilderness in that region. His mother's father, Elijah Camp, was one of the first settlers on the Wyalusing Creek—now Camptown. His father, Luther Keeney, settled in Tuscarora, where he had been raised, and there the subject of this notice was born, March 25, 1839; and in the Tuscarora Valley, surrounded by nature's grand scenery—among the grand old hills and silver streams—his heart caught the inspiration which led him to bravely climb the rugged and lofty hill of science to satisfy his longing desire for learning and to linger among its unfading beauties. His early opportunities for education were of that primitive character, the remembrances of which still linger with us and call to mind the log school-house and poorly-paid teacher boarding from house to house. In these primitive institutions he was a faithful student, and so well did he improve the means within his reach that he outstripped his companions and became an apt and bright scholar. He afterward attended school at Kingston Seminary, also at the Institute in this place. In all his school studies his scholarship was the very highest.

"Quite early he engaged in teaching, in which he was pre-eminently successful. He had the happy faculty of imparting to others his own clear ideas and thoughts in such a manner as to make the most lasting impression, and of governing without force. He had the most well-governed and well-managed schools without severity, or any one scarcely knowing how it was governed. In 1869 he was elected to the office of County Superintendent of Common Schools, and re-elected in 1872 and again in 1875; his third term, or nine years in that office, would have closed in the spring of 1878.

"He stood up bravely and courageously against failing health and hoped to fight back his disease, but that death which like an overflowing stream sweeps all before it, called him to rest. He was one of a family of nine children. The parents have gone—seven of the children have gone before, and that gate which stands ajar has opened to receive our dear friend. One brother only remains here—father and mother, brothers and sisters, ten in heaven, one only left alone.

"In October, 1872, he married a lovely woman who was in every way worthy to be the companion of so good a man. Their home has been a model of happiness and love.

"Oh, the uncertainty of all human hopes! In the morning of life, in the meridian of his usefulness, he has fallen. The public have lost a faithful and valuable officer, society one of its brightest ornaments, and the wife a loved one whose presence brought happiness and sunshine wherever he moved. By uniform kindness, love, and charity he has won all hearts. In public duties and in social life his genial disposition and kindness of manner were ever present. Young men may emulate his virtues and follow his example.

"He has gone to join father, mother, brothers and sisters, who are waiting to welcome him. The entire community sympathize with the bereaved one in her sad affliction. We shall some day join him. His earthly work is done. His influence for good will only be fully known in eternity."

BOOK NOTICES

TEN-TIMES-TEN SERIES.—*Butler's Literary Selections, No. 3. For Reading and Declamation. Pp.: 192. Philadelphia: J. H. Butler & Co. Paper, 35 cts; Cloth, 75 cts.*

This is Number Three of the new series of Selections now issuing from the press of the Messrs. Butler & Co., of Philadelphia. The first two numbers of the "Ten-times-Ten" have been very favorably received, and the third, now before us, sustains the excellent character of the series. Books of this kind do not belong to the regulation list of school books; but, as pupils are usually at liberty to purchase such Speakers, or books for declamation or extra readings, as they may prefer, it is in this manner that these admirable compilations will find their way into the hands of the pupils. We know of nothing else equally good at so low a price. They have been compiled by a teacher of long experience with pupils of advanced grade, and come direct from the atmosphere of the live school-room. The leading design of the compiler has been to make such books as shall *deserve to last*, such as shall influence for good at once the thought and the character of the pupil—such also as the teacher will choose to have about his desk for occasional or frequent readings to his school. They are books that must leave on the minds of the young only wholesome impressions, and pleasant thoughts of things good to be remembered. The range of selections is very wide, as they are from authors of all ranks in the guild of letters. The "Shining Ones," a chapter from Anna Warner's delightful little volume, "The Other Shore," will of itself be worth the cost of No. 3 to the Bible-loving teacher. The book is printed in handsome old-style type. Its make-up is in good taste, and such that not a line of space seems wasted anywhere. The aim of the compiler has been to include as much and as choice matter as possible. The publishers advertise the several numbers—1, 2, and 3—postpaid to any address, on receipt of $1.00 for the three books. There can be few gifts more appropriate, or that would be better appreciated by the intelligent school-boy.

ON THE STUDY OF WORDS, *By Richard Chenevix Trench. New York: W. J. Widdleton.*

Here we have an old work newly edited, with considerable additions. This work of Dean Trench has done much toward stimulating a closer study of English, and, although here and there he has introduced matter which does not seem very relevant to his theme, yet the volume may be recommended to the student as a valuable aid in his study of English. In order to give the reader who is unacquainted with the work some insight into the author's method, we subjoin the following extract:

"I read Goldsmith's *Traveller*, or one of Gay's *Fables*, and I feel that I 'comprehend' it; I do not believe, that is, that there was anything stirring in the poet's mind or intention which I have not, in the reading, reproduced in my own. But I read *Hamlet*, or *King Lear:* here I 'apprehend' much; I have wondrous glimpses of the poet's intention and mind, but I do not, for an instant, suppose that I have 'comprehended,' taken in, that is, all that was in his mind in the writing, or that his purpose does not stretch, in manifold directions, far beyond the range of my vision; and I am sure there are few who would not shrink from affirming, at least if they at all realized the force of the words they were using, that they 'comprehended' Shakspeare, however much they may 'apprehend' in him."

ECHOES FROM MIST-LAND; *Or, The Nibelungen Lay. By Auber Forestier. Pp.: 218. Chicago: S. C. Griggs & Co.* 1877.

The above title is that given to a prose version of the celebrated Nibelungen Lied, by Mr. Auber Forestier. We had hoped to institute a comparison of the translation with the original poem, but the version of the story which Mr. Forestier has used is that of Karl Simrock, and we, unfortunately, have only the Lassberg version and that of Lachmann. We infer, from the translator's somewhat vague preface, hat he has not adhered not at all closely to the text of Simrock's edition of the poem. "We have told its tale," he says, "in simple English prose, in style as far as possible adapted to the mode of thought and expression of our day and country," and he speaks of having "simply attempted to follow its language in conversations, and in these only as far as modern prose would admit." But the thread of the story is preserved, and the principal events of the fascinating old German poem are given with essential fidelity. The student of literature who reads it in the mediæval dialect will, of course, miss many an exquisite turn of thought and expression; and the charming lilting melody of the measure and rhyme are denied us in the preface. Indeed, we doubt whether there is any living English writer, except Carlyle, who could have translated the poem adequately into our mother tongue while preserving the peculiar rhythm of the original. The few specimens he has given us in his essay on the Nibelungen Lied have shown how well he could have performed this work. Nevertheless, we recommend Mr. Forestier's version to all who wish to become acquainted with this famous and now classical legend.

LAW FOR THE MASSES. *For Everybody's Use. By Truman Hastings, Esq., Counsellor. Pp.: 281. Cleveland, Ohio: W. F. Schneider. Price, $1.25.*

This handy volume had its origin in a course of lectures delivered before the senior classes of the Western Reserve College. The object of the writer has been "to condense as much within a small space as may be consistent with clearness of statement and a right development of legal principles." In a country like ours it is often assumed that all persons have a fair practical knowledge of elementary law; but the assumption is a most violent one—for the knowledge of this kind possessed by the average citizen is ridiculously small. Many a lawyer has hung out his "shingle" on a more modest capital of knowledge in his profession than may be had from this little law book.

OUTLINES OF ETYMOLOGY. *By S. S. Haldeman. Pp.: 113. Philadelphia: J. B. Lippincott & Co.*

It is needless to say to those who are acquainted with Prof. Haldeman's fitness for the work he has here undertaken, that this is an excellent contribution to the literature of etymology. The general subject is treated in a thoroughly systematic manner, with abundant illustrations of a character not too learned for the ordinary student, and yet profound enough to furnish clues to the study which are possessed by but few. There is a freshness about the volume which renders it very attractive. G.

BECKER'S ORNAMENTAL PENMANSHIP.—*A Series of Studies in Ornate Designs and Letterings, with Notes Explanatary of the Text. By Geo J. Becker. Philadelphia: Miller's Bible and Publishing House. Sold only by Subscription.*

This sumptuously issued book of styles of letter, including Roman print, German text, Old English print, Church text, spurred and block letters, and a great variety of other block, script, and text letter, has been prepared by Prof. Becker of Girard College. It is designed as a guide and assistant to the teacher, penman, commercial student, engraver, designer, stone-cutter, sign-writer and painter, or other party whose interest it is to do good work from good models. The plates have been engraved—and many of them exquisitely done—by Earle, Areher, Borman, Meignelle and others. For further particulars address the publishers, as above, at 1102 Sansom St.

NEW PRACTICAL ALGEBRA. *Adapted to Improved Methods of Instruction in Schools, Academies and Colleges. By Jas. B. Thomson, LL. D. Pp.* 312.

The author says it has "long been a favorite plan" with him to make a practical algebra, that he has been for years at work in gathering and arranging his materials, that many of the more important parts of this work have been written, re-written, and revised, until they found place here in their present shape. The book gives evidence of care in its preparation; and in its plan and the common-sense development of the science it bears constant evidence of the presence of the teacher.

THE POLYTECHNIC: *A Collection of Music for Schools, Classes and Clubs. By U. C. Burnap and Dr. W. J. Wetmore. Large Quarto. Pp.. 208. New York: A. S. Barnes & Co. Price, $1.25.*

Many favorite melodies, including some of the most popular college songs and such sacred music as may be desired for the ordinary or devotional exercises of the school-room, will be found in this book. The secular music has been harmonized for mixed voices and words have been supplied to a number of favorite airs from the operas. The book does not have any elementary department, with exercises in the keys, etc., but the aim of the compilers has been rather to make a collection of music, all of which should be enjoyable.

STUDENTS' TOPICAL HISTORY CHART. *From the Creation to the Present Time, including Results of the Latest Chronological Research. By I. P. Whitcomb, Principal Young Ladies' Seminary, Brooklyn, N. Y. New York: A. S. Barnes & Co. Price, $2.00.*

Macaulay's comparison between history and historical romance is quoted as having forcible application to classified and unclassified school study. Says the historian: "Of the two kinds of composition into which history has been divided, one may be compared to a map, the other to a painted landscape. The picture, though it places the country before us, does not enable us to ascertain with accuracy its dimensions, distances and angles; the map gives us exact information as to the bearings of the various points, and is a more useful companion to the traveler or the general than the painted landscape." Catching the spirit of the contrast here indicated the author maps out, in an easy and rational manner, both age and nation, epoch, dynasty, ruler and date; and presents a plan for testing the progress of the pupil in history—no matter what text-book may have been studied—so apparently simple that the degree of attainment may be known with as much certainty as in arithmetic or geography. The page is a broad folio, with ruling and spaces—the former for the guidance of the pupil, the latter to be filled up by himself as he advances in the study of one nation or another. Space is not afforded for long descriptions —only brief and clear statements of facts. In the keeping of a book like this there is also a constant incentive to neatness, good penmanship and correct spelling.

THE HOLY ROMAN EMPIRE. *By James Bryce, D. C. L. Pp.: 479. New York: Macmillan & Co.*

This volume, written by an Oxford professor of civil law, is very superior to the trashy books which are commonly palmed off upon an undiscriminating public under the name of history. Most of those who write the so-called histories offered to general readers, suppress both what runs counter to their own pre-conceived opinions and what they think will offend the ordinary reader, thus confirming prejudices instead of enlightening the mind. It is superfluous to say that such "histories" are a positive injury to the world. Mr. Bryce seems to think that no truth is too good for his readers, and has, out of the vast fund of his knowledge, given us a very instructive book. The following short extract will suffice to show the spirit of the author: "The principles which had led the Protestants to sever themselves from the Roman Church should have taught them to bear with the opinions of others. A church which does not claim to be infallible is bound to allow that some part of the truth may be with its adversaries."

MACMILLAN'S PROGRESSIVE FRENCH COURSE. *Pp.: 77. First Year. New York: Macmillan & Co.*

This little hand-book is a convenient introduction to the study of the French language, an introduction so simple and easy that almost any one of good capacity and thorough knowledge of English may use it during his leisure, for a year, with advantage.

THE AGE OF ANNE. *By Edward E. Morris. Pp.: 241. New York: Scribner, Armstrong & Co.*

This is a very readable little volume, containing much matter to interest the general student, and will be especially serviceable to those who wish to make themselves acquainted with the writers, statesmen and military commanders of the famous reign it professes to describe.

ELEMENTARY MORAL LESSONS. *For Schools and Families. By M. F. Cowdery. Pp.: 260. Philadelphia: Cowperthwait & Co.*

An article on Moral Training will be found elsewhere in this number of *The Journal.* Cowdery's Moral Lessons we have long known as a book to be recommended in this connection. It is made up of anecdotes and incidents well chosen and well told—each of them occupying from one-half page to two or three pages. These sketches from real life are each designed to impress some lessons in manners or morals, in the broad use of these words, while the questions that follow each sketch are appropriate, and suggestive to the teacher or parent.

THE AMERICAN NATURALIST.—We find in the March number of this magazine the unexpected announcement that it will henceforth be published in Philadelphia, by McCalla & Stavely, under the editorial management of Dr. A. S. Packard, Jr., and Prof. E. D. Cope. To all who wish to be informed of contemporaneous discoveries in the department of natural history, this is the best authority in the country.

THE HEROIC.—The ordinary events of life are not strong enough to move the whole man; its deeper and more passionate moments show us what we really are. There is that within us which comes forth only upon some strong exterior call. This is the true use of the heroic, of a life transcending life's ordinary possibilities. Such a life is a direct call upon the soul, saying, "Friend, come up higher;" and the heart recognizes its voice, and exults in it, claims it as the voice of kindred risen to a more exalted sphere. It is like air from a mountain summit, where we could not live, and yet which seems our native air and braces us in every nerve. Deeds of heroic daring, of sublime self-devotion, how they stir our hearts, often torpid in response to the ordinary appeals of duty and reason! In teaching, we trust too much to mere intelligence, forgetting that there are many gateways into the soul, and that feeling bursts through them all. Indeed, there is a vast region, the finest and purest in our nature, that can be reached only through sensation.

ROBIN REDBREAST.

Words by ALLINGHAM.
GERMAN AIR.

Allegretto.

1. Good - bye, good - bye to Sum - mer, For the Summer's near - ly done, For the
2. Bright yel - low, red and or - ange, The leaves come down in hosts, The
3. The fire - side for the crick - et, The wheat-stack for the mouse, The

Sum - mer's nearly done; The gar - den smiling faint - ly, Cool breezes in the sun;
leaves come down in hosts, The trees are Indian prin - ces, But soon they'll turn to ghosts;
wheat-stack for the mouse, When trembling night-winds whistle And moan all round the house;

The thrushes now are si - lent, Our swallows flown a - way, But Rob - in's here in
The leath'ry pears and ap - ples Hang rus - set on the bough; 'Tis Autumn, Autumn,
The frost-y ways, like i - ron, The branches, plum'd with snow, A - las! in Win - ter

Chorus.

coat of brown, And scar - let breast-knot gay.
Au - tumn, late, 'Twill soon be Win - ter now.
dead and dark, Where can poor Rob - in go?
} O Rob - in, Rob - in Redbreast, O

Robin, Robin dear, O Robin sings so sweet - ly in the fall-ing of the year.

THE
SCHOOL JOURNAL
ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

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TEACHING TO TEACH, AND COMPULSORY EDUCATION.

PEDAGOGICS ABROAD.—VI.

MOST pupil-teachers enter upon their work with the belief that what they know they can teach. They are already acquainted with the methods pursued in the school in which they have been educated. The subjects which they have to teach are few in number; and they have been present at thousands of lessons on nearly every one of them. What more can they want, to become at once efficient teachers? A very little experience suffices to convince them that they have almost everything to learn in the art of teaching. They have to learn how to secure good order with a minimum of noise and effort; how to arrange the subject-matter of their lessons; how to arouse and sustain attention; how to present difficulties on their easiest side; how to aid the memory and sharpen the intelligence; how to question and when to question; and a thousand other matters on which they have never yet so much as reflected. Most kinds of labor seem easy to the looker-on; and the more perfect the workman the more easily does he seem to effect his purpose, and the more difficult it is to detect the secrets of his skill. He has arrived at the *ars celare artem*. By degrees it dawns upon the mind of a pupil-teacher that there is an art of teaching, and, still later, that this art must ultimately rest on the nature of the child that is to be educated.

It sometimes happens that a pupil-teacher is set to teach as soon as he is apprenticed, and is left to learn his craft as best he can. He blunders along from one mistake to another, as though education, so far as it is an art at all, were something entirely new, which he had to find out for himself. His work is, for a long time, rendered thereby doubly arduous, and often intolerably disagreeable. He contracts bad habits, as teacher, from which he will, at a later period, find it difficult to emancipate himself; and his teaching, instead of being a highly intellectual exercise, remains unintelligent, mechanical, and oftentimes miserably unfruitful. In the interests, therefore, of teachers and taught, it is in the highest degree important that pupil-teachers should be taught how to teach. One of the strongest objections to the pupil-teacher system is that it is ineffective. This objection would lose much of its force if pupil-teachers were employed to do only what is within the range of their powers, and were properly taught how to do that.

A pupil-teacher should be at once made to understand that teaching is really a very difficult art, which will demand the constant exercise of his highest powers; that there is a right way and a wrong way of doing the simplest things, and teaching the simplest subjects; and that nothing is trivial, which may be reproduced by a class of thirty or forty children, or which may contribute to

the teacher's own professional perfection. He should be led to see that, though a subject of instruction may be very simple, the minds that have to be taught it are marvelously complex, and that even so-called simple subjects rest upon infinite mysteries, the existence of which will be found immediately we go below the surface. The pupil-teacher's work will be relieved of much of its irksomeness when he perceives its inherent dignity; when he realizes the existence and nature of the art which he has to acquire; and when he sees the importance of constant observation of the children whom he has to educate, and of reflection on the methods which he employs. Every lesson he gives will be a lesson to himself. He will form a lofty ideal of the work of a teacher, and will set himself to attain it with earnestness, humility, and enthusiasm.

The natural order of training a teacher might seem to be to first teach him the truths of mental science and human physiology, that he might know the nature of the child whom he has to educate, and then to teach him the art of education itself; but this order is not a feasible one in the case of pupil-teachers, and I question whether it would be judicious in the case even of adults. You cannot learn to swim on dry land by studying the laws of Hydrostatics and Mechanics. Theory and practice must go side by side: practice to supply the facts upon which scientific induction is based, and to test theory; theory to direct the mind to the observation of facts, and to guide practice. Pupil-teachers are too young, when first apprenticed, to begin the formal study of Psychology. They must first learn to practice good methods, and wait for the full understanding of the principles upon which those methods depend until their minds are riper and better informed; though, of course, a good teacher will always try to secure, as far as possible, the intelligent co-operation of his pupil-teachers.

The first thing, therefore, that a pupil-teacher has to do, in order to learn how to teach, is to study the methods already at work in the school in which he is apprenticed, and endeavor to carry them out. To do this he must have sufficient leisure to be present, from time to time, at lessons given by the head-master or other adult teachers of the school; and the head-master must have sufficient leisure to see that he is following out properly the methods approved of. Such a condition of things is impossible when a school is worked with a "starvation" staff. No school should be so meagerly staffed that not a single teacher could be spared from his class without inconvenience. I am convinced that a reasonable liberality in the matter of staff is a true economy. The value of "the master'e eye" is notorious in every kind of business. It is difficult to exaggerage it in the case of a school. I am far from thinking that the head teacher ought to do nothing but superintend his subordinates; but, on the other hand, I should consider a school miserably organized, if neither he nor his pupil-teachers could ever be spared from the actual work of teaching.

It is not, of course, desirable that the methods of a school should be too rigid and uniform; but, as a rule, every head-teacher has certain methods of maintaining discipline and of teaching which he considers best, and those methods the pupil-teacher should carefully follow. Let them be distinctly known and enforced.

To take the case of reading. Reading is a subject which may be taught in a hundred different ways, and requires to be taught in very different ways at different stages. Let the method approved of by the head-master be laid down in black and white, and let it be like the law of the Medes and Persians. It may not be the best of all possible methods, but it is the outcome of the teacher's experience; it secures a certain unity of procedure in the school as a whole; and, whatever its defects may be, it is almost sure to be better than any method which the pupil-teacher can extemporize or elaborate for himself.

So with other subjects. A pupil-teacher should not be in a position to say, "I was never told what I had to do, or how I was to do it." The older pupil-teachers may be allowed somewhat more liberty; it may be even expedient to permit them occasionally to make practical experiments of different well-established methods; but obviously apprentices ought, first of all, to carry out the methods of their own master. Raphael must begin by reproducing the excellence of Perugino. By-and-by he will be able to originate new excellencies and create a school of his own. When the pupil-teacher goes to see other schools (opportunities for which he should never let slip) or when he goes to College, he will have opportunities of comparing the methods with which he is familiar with those of other teachers. When he is in charge of a school of his own, he will be in a position to strike out new methods. But, if he wishes to rise as a teacher, his as-

pirations can only be gratified by his first mounting on the shoulders of his predecessors.

The head-teacher, in watching the efforts of his pupil-teacher, will be careful to note his defects, and speak to him about them, either after school or at the time, out of the hearing of the class. Or he will, without seeming to supersede the teacher, take the class for a few minutes, and show by example the points in which he wishes him to improve.—*School Guardian, England.*

COMPULSORY EDUCATION.

In accordance with *The Journal's* avowed determination to hear all sides of all educational questions, we present below some strong words in favor of compulsory education spoken by Lord Rosebery, President of the Social Science Congress at Glasgow, Scotland. They are contained in the opening address:

Legislatures and governments have, at various times, attempted by direct laws to benefit the working classes, but the most obvious instance of this—the national workshops of 1848, and the Parisian Commune of 1871—have been conspicuous failures. It is well then, that in the present time, so peaceful and blessed, we can here discuss, however slowly and imperfectly, the frequent topics which our programme suggests. And there is so much to be done, our civilization is so little removed from barbarism, that at this moment there is a daily column in the newspapers devoted to recording brutal outrages, where human beings have behaved like wild beasts. Every policeman in London is assaulted on an average about once in two years. Within the memory of living man, the wreckers at the saltpans of Joppa, only a mile or two from Edinburgh, were sold along with the land on which they dwelt. Neither they nor their children could move from the spot or could alter their calling. The late Lord Provost of Edinburgh, who bears the honored name of Chambers, records his having talked to such men. What a tale, too, was described to Lord Ashley's Commission of 1842 for the mines, where women and children were employed as beasts, dragging trucks on all fours, and pursuing in unhealthy tunnels the degraded tasks which no mere animal would be found to undertake. We know that equal horrors existed in the brickfields two or three years ago, when there were 30,000 children employed, looking like moving masses of the clay they bore, whose ages varied from three and a half years to seventeen. It would be difficult and it would be painfully instructive, to draw out a dismal catalogue of facts to prove how little the splendor of our civilization differed from the worst horrors of barbarism.

And yet, after all, we can only come to the hackneyed conclusion that the sole remedy for this state of things is education—a humanizing education. It is not a particularly brilliant or original thing to say; but severe truth is seldom brilliant and original. There is a noble passage in De Tocqueville known probably to all, and too long to quote here, which points out that knowledge is the arm of democracy; that every intellectual discovery, every development of science is a new source of strength to the people; that thought, and eloquence, and imagination, the divine gifts which know no limit of class, even when bestowed on the enemies of the popular cause, yet serve it by exalting the natural grandeur of man; and that literature is the vast armory open to all, and in which the poor, who have hardly any other, may safely find heir weapons. These are features of education which all recognize, though some may profess to dread them. Besides, take the case of machinery. The winter nights of 1830 were bright with blazing rick-yards. No farmer in the southern counties felt his stacks safe. Again, what could a man do, who has little but natural instincts to guide him, when he comes into a fortune, and at once procures an increased quantity of what has been, in smaller doses, an enjoyment and a solace, if he has not been educated to find his amusement elsewhere? If one of us should succeed to a large fortune to-morrow, we certainly should not spend our inheritance in drink; but the difference is one solely of culture.

My contention is that, in an educated country, among a nation educated, not in Shakespeare and the musical glasses, but so instructed as to be able to find amusement outside the public house and skittle alley, a great increase in wages would not have been followed by so enormous an increase in the consumption of spirits; and an enormous consumption of spirits means an enormous amount of crime and pauperism. The assertion is capable of proof, which is almost direct. The best educated country in the world is Saxony. This is what a Saxon mining superintendent says: "We have a few who drink brandy, but, as a rule, they are steady." Take another country where education is universal. In 1819 compulsory laws, requiring every parent to educate every child, were enacted in Prussia. At first, of course, there was a violent opposition, and the usual hue and cry of "invaded rights;" but in twelve years crime and pauperism had diminished 40 per cent. Take the colliers. The papers have been filled for the last year or so with anecdotes of the colliers; their immense earnings, their expenditure in champagne, and horses, and hot-house fruit. I am persuaded there is a large section of society which believes the colliers pass three days a week in sucking peaches and driving tandems. But what is the state of intelligence among even the younger generation of colliers? "Out of fifty (lads) examined in nine different night schools in 1867," says Mr. Sandford, "29, or 58 per cent., could not read. These night scholars are certainly not the most untaught of the colliers' lads." "There's none of them as can read in our pit," I heard two young colliers say: "no, nor the master neither." And yet we wonder that our colliers do not invest their earnings wisely!

I will put only one more case. Improvements in locomotion have made life more easy, but also more cheap. Our lives are staked on the exact intelligence of each of a great number of comparatively uneducated men. When we recollect the nice adjustment, the momentous punctuality, which are required of a pointsman or a signalman, and all that depends on them, we should ensure that such responsibilities should not be cast upon men whose faculties have not been carefully trained. And yet we act as though education were desirable, but not imperative. Well, it may be asked, to what does this recital of known facts tend? To a very simple proposition. I cannot believe that there was ever a more clear necessity before any government or any country than the impera-

tive duty laid upon ours to institute a directly compulsory education. If the assertion be true that the nation is not ripe for the reception of an undoubted benefit—a benefit clear and as certain as fresh air and pure water—we can only be more certain that this education is greatly needed. If it be seriously argued that the interference with individual liberty is too stringent, we must call into the witness-box Macaulay's well-known school-boy, to assure us that a policeman, a tax, and a railway bill, are all direct interferences with individual liberty. The natives of Scotland are not considered unduly servile; yet they submit to compulsory education. The same cry was raised in Prussia more than half a century ago, but the education of her people has not merely effaced Jena and its consequences, but produced the German Empire of to-day.

SUPERVISION OF SCHOOLS.

SCHOOL SUPERINTENDENCE.

WHEN the late Horace Mann entered upon his duties as the first secretary of the Massachusetts Board of Education, and began his vigorous crusade against the apathy and indifference of the people in regard to their schools, he emphasized two important needs of the schools: More and better supervision, and teachers of higher qualifications. *More* supervision was demanded, because the fact was undeniable that the schools did not receive that care and oversight which their importance demanded; *better* supervision, for the reason that it often fell into the hands of those whose knowledge and experience were unequal to the task; teachers of better qualifications, because in almost every community many of those in charge of the schools were confessedly unfit for the real teaching and training of children and youth.

The lapse of forty years has not fully met these needs; for to-day we find the earnest friends of education everywhere giving much thought to these same topics, and lamenting that the schools are, to some extent, still impeded by the same hindrances.

It is with the former of these topics that this article will deal; and I do not deem it necessary to discuss here the importance of school supervision in its more general sense, for the necessity of supervision in some form, is universally conceded by all whose opinions entitle them to be competent judges in the matter. That form of supervision, therefore, generally exercised by a single person, under the name of Superintendent, or supervisor, shall be considered.

The first School Superintendent, properly so called in New England, was, I suppose, Nathan Bishop, who became Superintendent of the schools in Providence, R. I., in 1839. Boston has been quoted as next in order, though some years later; but my impression is that that city must yield the palm to Springfield, on the Connecticut river, where the office was established in April, 1840, when the nucleus of the present city was a town of only 10,000 inhabitants. Mr. S. S. Greene, author of Greene's *English Grammar*, and now professor in Brown University, was appointed to the position, and served two years, when the office was suspended for the want of an appropriation for its support. Mr. Greene's two reports are now before me, and are good specimens of educational documents, treating of the schools as to their work in detail, and discussing, in a very sensible way, some live educational topics.

The reasons which have led, in many of our communities, to the appointment of a special Superintendent of Schools, who shall give all his time to their supervision, are too obvious to require any very particular explanation. A few, however, may be very briefly mentioned.

It is difficult to find, among professional and business men, those competent for the work, who can give the requisite time for the efficient supervision of the number of schools usually found in any city or town of considerable size. Those whose education, knowledge of schools, and general fitness, qualify them for the task, are the very men most likely to be so engaged in the urgent duties of some active occupation that the necessary leisure for the care and frequent visiting of schools is not at their command.

Unity of system and plan, in the work of the schools, can be secured with a Superintendent better than where the supervision is conducted by a committee of several persons, working, as is usually the case, on different plans, and without conferences sufficiently frequent to make their labors tend toward the accomplishment of similar results. The same principle is recognized in corporations, and other instances of united effort. The success of all large business interests, where the number of persons employed is considerable, and the work to be accomplished extensive and various, depends upon wise supervision by one who directs all operations with reference to the accomplishment of a definite work. That one person may have assistants or deputies, where the operations are large, but the plan is a unit.

To conduct the schools on the most im-

proved plan of discipline, instruction and general management, requires not only an intimate acquaintance with the schools in all their details—such an acquaintance as can be secured only by frequent visits and careful inspection—but, also, the observation of school work in other communities, and much study and reading upon the subject of education. This can be successfully done only when a person gives his entire time and thought to the work, without distraction by other cares and occupations.

The selection of teachers; their assignment to their proper fields of labor; and their subsequent continuance in, or removal from, those fields– three of the most important duties of school management—cannot be judiciously and safely done, unless the supervisory power is intimately acquainted with the characteristics of the different schools, and with the qualifications and peculiar fitness of the teachers. Such a knowledge is readily acquired by a Superintendent who is in daily contact with the schools, but not so easily by all the members of a large committee. Obtaining this information, however, from the superintendent, their performance of the above-named duties can be guided by a knowledge of all the facts in the case. Indeed, a similar advantage is derived by school committees, or school managers generally—by whatever name they are called—in all their deliberations concerning the schools. They are the legislators, and to them the Superintendent is constantly furnishing information and suggestions for their guidance; and in no other way can they obtain so complete and so reliable a view of the wants of the schools entrusted to their charge, and of the best methods of supplying those wants.

Very few objections have ever been brought against the office, and those few have absolutely no weight in the light of reason and fact. The avaricious and the sordid object to it, on the score of expense. Now, in reality, such persons ought to be its open advocates; for an efficient Superintendent *saves more than his office costs.* It is admitted by all good educators, and business men of sound judgment that, under a wise and close supervision, schools can be carried on from ten to twenty per cent. cheaper than where they may be left to run without such care!

Those who object to a superintendency as being a kind of one-man power, advertise their own ignorance of such a charge; for a Superintendent has no power except what he derives from the committees or boards of education in charge of the schools. This power is given him by the rules and regulations of his employers, or by their special votes and instructions. The committee possesses all the power; the Superintendent is their working agent, acting under their directions, and wholly responsible to them.

That well-qualified and independent teachers—teachers who are anxious for improvement,—are generally in favor of thorough and efficient supervision, it is safe to assert. Those fear it who are unwilling to submit their work to a fair test; who are conscious of their own unfitness; and who are afraid to get up out of the ruts, and to try a new and better path. From Maine to California, no class of persons has been more anxious for a thorough and judicious supervision of schools, than the live, progressive teachers who command the confidence of their employers and patrons.

That the Superintendent's field of labor is a wide one will be evident to even the casual observer; while to those who are familiar with school work in its great variety of detail, it will present itself also as one of great responsibility and never-ending duty. It pertains to the teachers and their works and has relation to the parents of their pupils, and to the community; to the pupils and their work and progress; to the patron, of schools and the public; to the care and condition of school buildings and all school property; to school methods, text-books, and other appliances for school work; indeed, to everything necessary for the best conduct of the schools, and the greatest improvement of which they are capable.

To meet the highest requirements of his office, the School Superintendent must be loyal to his employers, a friend to the teachers and the pupils, an impartial mediator between the school and parents when occasion demands, and a watchful steward of school property.

Loyalty to employers and supervisors is one of the first elements of fitness in any department of labor; and in school work, neither superintendents nor teachers have a right to continue in the positions to which they are assigned, unless they can faithfully carry out the instructions and wishes of those under whom they labor. If they think they have a better way of their own, than the one marked out for them, it is their duty to convince their employers of that fact, and to secure their endorsement or permission to give it a trial, before departing from in-

structions. This remark does not, of course, apply to that portion of their work which is left to their own direction—often quite a large and important part of their duties, and one in which they have ample opportunity to show their power and independence.

As the Superintendent's most important field of labor is in the schools and with the teachers, a good understanding and an amicable relation should exist between them, that they may supplement each other's efforts, and secure on the part of each the heartiest co-operation in all that pertains to the welfare and progress of the schools. For a like reason, similar relations should exist between the Superintendent, parents, pupils, and the public. Such a state of feeling enables all parties to utilize, to their fullest extent, all good agencies for the success of the schools.—*A. P. Stone.*

UNPOPULARITY OF SUPERINTENDENTS.

As long as a great city like Philadelphia is without a School Superintendent, even the city superintendency has not passed into the universal category. But the city officer is an honored fixture as compared with the County Superintendent, who is lightly esteemed by society, as is evinced by the small pay allowed him, and who is often exceedingly obnoxious as seen by his abolition in Ohio and elsewhere, and by the bitter war that is made upon him in many States. This is surprising, when considered abstractly. One would expect an officer charged with such functions to be highly valued and honored. He certainly ought to be. Then why is he not? This is a very important question, and intimately connected with the efficiency of public education.

The explanation is manifold, and it illustrates the difficulties of public education in a republic. The character of a school system in our country cannot rise much above the average intelligence of the people; and whatever represents quality rather than quantity, will usually have a struggling existence. The Superintendent represents the quality of the school—an element which cannot be appreciated by the average mind; but he also draws a salary—an element which can be understood by the commonest mind; hence, if this officer of doubtful utility absorbs money enough to support half-a-dozen short-term schools, of course he ought to be razeed, if not abolished. The children's bread must not be given to ornamental functionaries. Moreover, in backward communities, the idea lingers that public education is an eleemosynary enterprise which should be supervised like missionary work by unpaid committees, and the school-money be left for the actual laborer in the school-room. And hence the community which is willing to give good pay to assessors, collectors, supervisors, judges and attorneys, grumbles at giving anything to a school officer.

But there is another side to this matter. The Superintendent often fails to earn the money he gets, and the people find it out. It is true that, owing to the unobtrusive character of his duties, he will sometimes be judged unjustly; but commonly the degree of his efficiency will be well understood. Besides the necessary routine duties of the office, there is a large discretionary territory of duty which the officer is tempted to cultivate but partially, and too often neglects. This is not surprising in cases where the pay constitutes only a part of the incumbent's support. His heart, as well as his time, is as much (or more) in some foreign occupation as in his school work. And where the office has been bestowed upon some doctor or farmer who takes it—not because he either knows or cares about the work, but solely because he wants more income—the incumbent will naturally shirk duties which he not only does not love, but which he feels himself to be unqualified for. And of course the people grudge the money that goes to him.

Again, this officer almost unavoidably makes enemies in the proper discharge of his duties, and is held responsible for everything that offends anybody in school matters. As soon as a license is withdrawn from a drunken teacher, the rejected one immediately becomes a martyr, and the Superintendent a Nero, in the eyes of the neighborhood. If a boy be thrashed at school, and the teacher be not decapitated, the County Superintendent should suffer the extreme penalty of the laws! If the school-house is put here or put there; if the school term is thus and so, or any other way; if the trustees do something or do nothing, of course all malcontents blame the Superintendent! There is no other county or state officer who has to deal so directly with people in the exercise of a large discretion. Other civil officers simply discharge sharply-defined requirements of law, and hence incur no blame; but whilst there is law here, it is law requiring independent judgment at every

point; and this makes the Superintendent a ruler rather than a servant, and it stirs more opposition than is aroused against any other official.

But the great reason of all is now to be mentioned—he is too powerful! In spite of all assaults, he remains the most influential official in his county. The ordinary county or township officer appoints and removes nobody, and supervises nobody. The judge, the sheriff, the magistrate, the prosecuting attorney, are nobody except to culprits. The assessor, the collector, the treasurer, are simply routine servants without patronage. But the Superintendent of Schools stands at the head of a powerful organization of trustees and teachers, with whom he has close correspondence, and over whom he has less or more authority; and he also supervises the distribution of large moneys. Such authority would be accounted a small matter in a government like that of Prussia, or even England, but it is unexampled among the features of a republican state government. Hence the office is often a source of apprehension with thoughtful citizens, of jealousy with politicians, and of hostility with enemies of public education. Hence it may be struck at by all those classes, from diverse motives. Even the friendly citizen may apprehend danger to the liberties of the people, the politician may here see a power which might overthrow his schemes, and the enemy of public schools may see in it the propagating centre of the school system. And, as if to give strength to opposition, a County Superintendent now and then dabbles in politics, either as a partisan or an aspirant, and more or less consciously seeks to rally the school brigade to his support. This is and always must be injurious to the officer and to the school cause, even though some local and temporary triumph may be gained. Whether he be a candidate, or the partisan of a candidate, he enters the field with an advantage which his adversaries and all bystanders feel to be unjust; and the aspect of the movement is that of an improper, if not a treacherous, perversion of official influence. Even if the official robes have not been soiled, the official *prestige* is weakened, and every adverse feeling strengthened.

With all these adverse influences, it may be considered a matter of surprise that the County Superintendent was ever born in this land of liberty and political privileges, and having been born, that he was not strangled long ago. But he still exists; and, upon the whole, he is fighting his way upward, though slowly, very slowly, in the general public opinion. He is, however, in fact as essential as the hub to a wheel, in every ideal school system worthy of the name, and is firmly established in the good opinion of the educational hierarchy in every state and country, and of long heads generally. The County Superintendent of Schools, then, in a word, is evidently a very strongly marked character, concerning whom there is much to be said on both sides. And it may be worth while for us to consider hereafter, first, whether this gentleman should be killed or kept alive; and secondly, if kept alive, what ought to be done with and for him.—*N. E. Journal of Education.*

SUPERINTENDENCY IN CALIFORNIA.

No system of education, however perfect, can be of any great practical utility unless its details are fully carried out. To accomplish this object, no means have been found more effectual than a thorough system of inspection and supervision. What such a system is capable of doing can be seen in the districts of the Dominion of Canada, where the superintendents, or inspectors, as they are called, occupy the whole of their time in visiting schools, criticising the teachers' methods, suggesting improvements, and bringing about a general uniformity in instruction. The effects of this system are evident. Nowhere on the American continent are the schools better conducted or the pupils better taught.

To us it appears that the aim in creating the office of County Superintendent was to accomplish precisely these results. Yet so far from regarding the office with favor, several successive Legislatures have seriously contemplated abolishing it. And why? Because legislators believed the office to be a sinecure; something for which there was no demand,—where there were no duties to perform. Yet, this is not so. Our excellent educational system is hampered for want of efficient supervision over the schools it creates and sustains. And in nowise are the County Superintendents to blame for this. Indeed, a more energetic, capable set of men it would be difficult to find. The obstacle to progress is simply this—insufficient remuneration. In perhaps six or seven counties of the State do County Superintendents receive a salary sufficient for their needs; in the remainder, the stipend is too small to deserve consideration. The

Superintendent teaches or engages in some other occupation, and the salary of the superintendency is an extra and a small one at that. His time does not permit more than the most cursory and superficial supervision of the schools of his county.

As the law stands, there is no system in the gradation of the salaries of the Superintendents. In some counties, where that official is personally popular and in political accord with the dominant legislative faction, the salary is reasonable; in the adjoining county, with an equal number of school districts, the compensation may be from twenty to sixty per cent. less.

The remedy for this condition of things is extremely simple and equitable. Let the Legislature enact a clause, similar to the one in force in Canada, affixing a salary to the office of County Superintendent varying with the number of districts in the county, but at a minimum of, say, $30 for each district. Then a clause should be inserted, providing that the Superintendent shall not pursue any other occupation, while serving in that capacity. We believe the general efficiency of our schools will be greatly promoted by some such action as is here suggested.

The work of supervision must be done. Is it not best that it should be well done? Teachers and friends of education generally should see to it that members of the next Legislature are thoroughly familiarized with the educational needs of the various counties. And among these needs, we can see none more urgent than the institution of a complete system of county school supervision, by the payment of adequate living salaries to the County Superintendents.

Pacific School and Home Journal.

SCHOOL VENTILATION.

A FEW of the important principles involved in the proper ventilation of a school-room, may be regarded as settled. The room must not only be supplied with pure air, but, in cold weather especially, this pure air must be warm, and it must not be too dry. What is needed is an abundant supply of pure warm air, containing the requisite amount of moisture. This is the first condition of good ventilation. The mere statement of this condition is sufficient to show the inadequacy of windows as a means of ventilation. They admit cold air, thus lowering the temperature of the room. In severe winter weather, this becomes so great an inconvenience as to necessitate the closing of the windows to exclude the cold air. Besides, the windows of school-rooms are sometimes so situated that they cannot be opened in cold weather, even at the top, without sending currents of cold air upon the pupils sitting near them. This difficulty may be partially obviated by lowering several windows a little each. This is much better than to lower one window much, except when the window lowered is near the stove, and not too near the pupils. In cold weather, the windows should remain closed a few minutes after the opening of school, but, as soon as the room is sufficiently warm, they should be opened a little, if possible, and always at the top. When there is wind, they should always be opened on the lee side of the room.

But how may school-rooms be supplied with air which is both pure and warm? Let experience furnish an answer. When buildings, not too large, are heated by furnaces, this may be readily secured, provided the furnaces are properly constructed. The furnaces should be large enough to avoid the necessity of over-heating, thus burning the air and destroying its vitality—to use popular language. The cold-air ducts should lead from the furnaces to the outside of the building. It is a great blunder to let the hot-air chamber of a furnace open into a cellar or basement. It should be supplied with fresh air direct from "all out doors." Further, these cold-air ducts should be large, and they should extend from the furnace to the opposite sides of the building. This will secure proper draft, whatever may be the direction of the wind. Furnaces should also be provided with means for the evaporation of water, to supply the requisite moisture.

A majority of school-houses, especially in country districts, are too small for the convenient use of furnaces, and hence they are generally heated by stoves. But the common stove is not a good ventilator. Instead of bringing warm air into the room, its draft makes every "crack and crevice" a means for the entrance of cold air. Stoves may, however, be so constructed as to introduce into the room a constant supply of fresh warm air, and thus they may be made the best of ventilators. To this end, the stove, except the door and draft-opening, should be inclosed with a casing, with openings in the top and terminating below in a cold-air duct, extending under the floor to the wall

of the building and opening into the outer air. When the stove is heated, the air between the stove and the casing is heated, and, being thus rarefied, it rises, and the cold air from without flows through the duct to take its place, and thus a constant current of fresh warm air is poured into the room. Such a stove is a small furnace, the space between the casing and the stove being the hot-air chamber, and, as a ventilator, it is much better than a basement furnace, as will hereafter be shown. Years ago we used a stove constructed in this manner. It was a great success, and we wonder that the ventilating stove is not in general use in school buildings not heated by steam or furnaces. Its cost need not exceed from $40 to $50, and even as a means of evenly distributing warm air through a room and avoiding the overheating of pupils who sit near the stove, it is worth more than its cost.

The hot-air chamber of the stove used by us was supplied with only top openings for the escape of warm air. This made it somewhat inconvenient for warming or drying the feet. This defect might easily be remedied by two sets of exit openings, one above and the other below, with a simple contrivance for closing the one and opening the other. By closing the upper openings, the current of warm air would be directed to the floor. A ventilating stove should always have a vessel for the evaporation of water.

But the introduction of pure air into a school-room meets only one condition of good ventilation. There is a second condition, almost if not quite as important. Impure air must be removed from the room. The breathing of air fills it with carbonic acid gas and impure exhalations, and it is necessary that this poisoned, impure air be removed. A complete ventilation requires a circulation of air—the flowing of pure warm air into a room and the flowing of impure and poisoned air out of it. The failure to meet this second condition is the weakness of nearly all systems of ventilation.

One of the most stupid and, we are sorry to add, most general of these blunders, is the system of ventilating flues. These flues, as ordinarily constructed, are utterly worthless, and for the reason that they are cold flues, and hence have no draft. Ventilating flues should always be constructed in connection with the smoke flues, so that they may be heated. This may be done by separating the two flues by thin plates of iron, or, what is better, by placing the smoke flue, in the form of an iron pipe, within the ventilating flue. The heat of the smoke-flue will cause the necessary draft in the ventilating flue, and thus a good circulation is secured. This arrangement is so simple and inexpensive, that it may be introduced into the cheapest one-story houses, heated by stoves, as well as into large buildings, heated by furnaces.

The openings in these heated ventilating flues should be near the floor. Carbonic acid gas is heavier than common air of the same temperature, and hence the vitiated air, which needs to be removed, is found in greatest abundance near the floor. This explains the efficiency of an open grate or fire-place as a ventilator. The draft takes a large volume of air from the lowest portion of the room, and hence much poisonous gas is removed. This also shows why the lowering of windows does not sufficiently purify the air of rooms heated by common furnaces. The windows permit the escape of the warm air, which rises and fills the upper portion of the room, but they fail to remove the vitiated air below. The fresh air, which they admit, does, however, lessen the deleterious effect of the poisonous gas which the pupils are constantly breathing into the room.

We are now prepared to see why the ventilating stove is superior to the basement furnace as a means of ventilation. It not only sends a current of pure warm air into the room, but its fire-draft takes impure air out of it. The current of air from the room also increases the flow of pure warm air into the room, thus increasing the needed circulation. In other words, a ventilating stove meets both conditions of good ventilation (the second partially), while the furnace, as ordinarily constructed, meets but one. But the fire-draft of the ventilating stove should be supplemented by ventilating flues, constructed as above described, and with large openings near the floor.

We have thus given some of the results of investigation and experience in the ventilation of school-rooms, and we commend the subject to teachers and school officers as one of the greatest practical importance. The health of thousands of pupils and teachers is impaired every winter by the want of properly ventilated school-rooms; and, in view of this sad fact, may we not urge teachers whose rooms are heated by ordinary furnaces or stoves, without ventilating ap-

pliances, to make skillful and faithful use of the windows—their only reliance. It requires constant care and good judgment so to manage windows as to supply fresh air and, at the same time, avoid the pouring of currents of cold air on pupils.

National Teacher.

EFFECTS OF THE INDULGENCE OF PASSION.

DR. JOHN CURWEN.

IT is a law of the human economy, exemplified in the daily duties of life, that the frequent repetition of any act, the constant indulgence of any passion or emotion, will have the tendency to strengthen the hold of that particular act, passion or emotion, on the mind or bodily system, and render its removal more difficult by reason of the lengthened repetition or more continued indulgence.

In the early periods of life, when all the organs are more sensitive, and impressions more quickly and decidedly made, and when all such impressions are also attended with more lasting consequences, it is very desirable, in order to preserve the integrity of the different organs, more particularly those of the brain and nervous system, to avoid everything which could in any way have a prejudical influence.

Every act of the mind and every operation of the nervous system, is proved by the researches of physiologists to cause or involve a change in the part acting or acted upon; and if this action is greater than the normal healthy action, or repeated too frequently, a greater or less injury will be inflicted, dependent, of course, on the continuance and violence of the action. In a person under the influence of a great passion, there is at first most generally an unusual paleness of the face, followed by extreme redness, and an unusual expression of the countenance; and if such is the outward appearance, visible to the eye, what must be the effect of the undue amount of blood thrown upon the brain at such a time?

It is also a fact which must be observed by every one, that after every excitement there is always a degree of depression equal to the excitement, and every one has experienced the peculiar feeling following the excitement of anger or any similar passion. The indulgence of such bursts of passion must necessarily produce an excitement in the very minute cells of the brain, from the increased amount of blood thrown into them; and when this is frequently repeated, the structure of these cells must be injured, for the obvious reason that no part of the brain can sustain such unnatural conditions without injury to its very delicate structure.

In the minute structure of the brain, the blood is conveyed to the more delicate parts which are concerned in all intellectual and moral acts, by a series of blood vessels, called from their minute character, capillary, but so small as not to be distinguished by the unassisted eye. These vessels are not only very minute, but they are extremely numerous, as the brain is thought to receive at least one-eighth of all the blood which passes from the heart. If the blood flows in a regular, equable stream, these vessels can convey it without any difficulty to all parts to be nourished by it; but if it should be pressed into them in undue amount, and that often repeated, some change must necessarily take place in them and in the parts supplied by them. Those who have given very careful attention to the examination of microscopic appearances of the brain after death, inform us that they very often find these vessels very much twisted and bent out of shape, and in many places so swollen as to resemble very much a string of beads, the string corresponding to the natural size of the vessels, and the enlargements to the beads. These appearances are caused by the efforts of the vessels to accommodate the unusual supply of blood forced into them, and are almost invariably found in persons given to frequent indulgence in intoxicating drink. Every one is familiar with the very sudden redness and often soreness of the eyes produced by a cinder or any unusual substance which may fall into the eye; and as the structure of the minute cells of the brain is much more delicate than the parts of the eye which are exposed to view, it can very readily be understood that a greater injury would be likely to result from the excess of blood thrown upon these cells, by the repetition of bursts of passion or other similar cause, in the same way that a cinder falling into the eye, before or just after the effect of another cinder had been entirely healed, would give rise to serious inflammation, particularly if several should follow in succession.

Instances have been recorded where men have died of apoplexy, which is very gener-

ally the rupture of some one or more of the blood vessels of the brain, while in a violent passion; and this is easily understood from the appearance of the vessels stated above, because when so much stretched, their coats must become thinner and more easily ruptured.

Another effect produced by indulgence in any of the passions is, that, unless great care is taken to watch over and prevent repetition, they gain control over the person, and after each repetition, the power of control becomes weaker, and the outbursts are more violent and continue longer, until the person loses control entirely, and on the very slightest provocation a violent outburst is likely to occur, often attended with serious consequences to the individual himself or to some of his friends. While these outbursts are indulged in, the influence on the brain must, from what has before been stated, be very injurious, altering its structure, and gradually rendering it much more liable to disease, if actual disease is not thereby produced.

Every one who has observed another in a violent passion, knows that for the time that person has lost proper control of his thoughts or actions, and this led the ancients to say that "anger was a short madness." While we may not be willing (for reasons which it would take too long properly to explain) to admit that anger is insanity in the proper acceptation of that term, we may yet be allowed to say that the constant indulgence in anger or any similar passion will very readily expose the person to attacks of insanity from the injury done to the minute structure of the brain, as explained above, and the insanity thus produced, will be likely to be of a character very difficult to remove, for the very obvious reason that the disease of the brain causing the mental disorder has come on very gradually, and has assumed a character which it is almost impossible to remove by any medical appliances. Besides, the insanity will not probably be definitely manifest, or admitted, until the injury to the brain is very decided; and a disease of slow and insidious growth will produce such positive alterations of structure, and consequently of function, that no reasonable hope can be entertained of its removal. Similar results may be expected from the indulgence of the malevolent affections and emotions; for it is a striking fact that while the benevolent affections rarely, except in great power, suddenly manifested, produce any injurious effect, the indulgence of the opposite class always tends to serious disorders of the mind or of the general health.

The lesson to be drawn from this is the careful exercise in all the daily duties and actions of life, of the apostolic maxim, "Let your moderation be known unto all men," in what you think, and in what you do, in the indulgence of all your passions, emotions and affections, in all you eat and in all you drink; and indulge in nothing which will disturb the mind.

To parents and to all who have the care of children, the lesson comes with great force and power, that every effort should be made by them to impress, both by precept and example, the urgent necessity of self-control—control of the temper, the passions, and every faculty; and this control should be exercised from the very earliest moment. The sooner it is commenced, the easier will it be acquired and maintained. It will not do for parents to attempt to teach self-control to their children, where they do not exercise it themselves; for precept and practice should always go together; and while the command is "Honor thy father and mother," the apostolic command and application is equally positive, "Provoke not your children to wrath, but bring them up (nourish) in the nurture and admonition of the Lord;" the words used, implying a careful, diligent and earnest effort to inculcate all those principles which will lead to peace and happiness in this life, as well as in that which is to come.

A WORD WITH MOTHERS.

S. G. GOODRICH.

MATERNAL influence is acknowledged by legislators, philosphers and divines, to be one of the principal causes which give character to nations as well as to individuals. This truth, so generally allowed both through history and experience, ought, Peter Parley thinks, to be sufficient to induce all who value the interests of society or themselves, to inquire how this influence can be made the most of, and if there are not ways and means to be made available to render a mother the first and best agent in education.

The relationship in which the mother stands to her child is such, that it requires on her part all that intelligence can command, all that self-discipline can accomplish,

to enable her to fulfill the important office with which she is invested by nature. The introduction of a thing of helplessness to a sphere of activity—the development of the unfolded germ of human existence, and the sentient principle—and, above all, the fitting of the immortal part for the performance of its duties here, and for an eternal hereafter; this mighty work devolves upon the mother.

To render the mother equal to the sorrows, the trials, the anxieties, and the cares incumbent upon the maternal state, nature, or rather the divine Author of nature, has implanted in the mother's breast a love for her offspring dearer than life itself; but this holy, this beautiful affection, requires to be supported by the highest intelligence, and to be regulated by the most comprehensive knowledge. The mother must reflect that the instinctive affection she feels for her offspring, she shares in common with *what are called* the *lower* animals; but the thinking love, which will alone enable her to perform her duty to her child, is the result of experience, and is dependent upon the reasoning powers. The affection shown to a child, which has not its basis upon reason, is liable to bring the child to shame and the parent to sorrow; and hence we frequently observe, in every grade of society, that the maternal love is not returned by filial affection, and that disobedience and slight is shown where the deepest veneration ought to dwell. How often does the fond mother exclaim to her petted darling, "Aye, you will not love me, when you grow a man;" a prophecy suggested by every-day examples of disobedience which are too fearfully realized.

Why is this? Simply because it is the fashion to let education take its course; because it is the fashion not to study human nature; because the mother knows little of a child's mental and moral economy, and thinks it too much trouble to inquire. In the earliest periods, how often is the child the victim of his own self-will? how often the plague of a whole household, the cause of contention between parents, of anxious days and sleepless nights? As the sun of life arrives, it comes not as a herald of joy, it brings forth no buds of promise, no blossom of hope, but stands "all in a hot and copper sky"—scorching rather than illuminating, and blighting rather than developing.

The mother must reflect that education, in its true sense, is not a mere mechanical task, a set of patent processes, an accumulation of profound dogmas, or a multiplication of cut and dried rules. Nor does it consist in a series of admonitions and corrections, of rewards and punishments, of imprecations and directions, strung together without unity of purpose or dignity of execution; but should present an unbroken chain of measures originating in the same principles—in a knowledge of the constant laws of our nature, practiced in the same spirit, a spirit of benevolance and firmness, and tending to the same end—the elevation of man's moral nature, not only above the sensual, but even over the intellectual. To this every mother stands pledged, and the great bond, the mind of her child, is drawn out ready for her to sign.

Thus the mother's great endeavor must be to build up humanity; the passions, appetites, intellectual power, mental energy, come alike under her attention in this work. It is for her to strip the grosser husk from passion, and to develop the germ of enthusiasm, which lies concealed within it, to purposes of good; not so much to repress the appetite, as to fix its impulses upon pure and wholesome food, with a view to its imbibing principles of conduct, to imbue the intellect with the morality of pure sympathy, and to turn those mighty manifestations of mind, which seem to rebound from the solid earth as in contempt of it, into the deep channels of humility, that they may run like gentle rivulets to fertilize and keep green the otherwise sterile and sere desert of human existence.—*Pen and Plow.*

FRŒBEL AND HIS WORK.*

MISS A. W. BARNARD.

SOME one has said that, "If horses were broken by people as unfit for their work, as most of the people who form human minds, every horse in the world would be dead lame." If horses have the advantage over people, in being blessed with wise trainers, it is a sorrowful truth indeed, but a truth too clearly apparent, when we see around us so many wrecks of the human, taking the rightful places of the beings said to have been made "but a little lower than the angels;" yea, even in the image of the Eternal! What a fearful responsibility rests upon those persons, who by means of the principles of a false and evil education, have transformed the light of these beings into darkness—their joy into suffering—their good into evil, and made them the wrecks they are!

In sublime contrast to these, here and there among the millions, arises one with a clear vision; a deeper knowledge of the mysteries of our triune nature, unto whom it is given truly to interpret its needs and wants. At first, like a greater who went before him,

*Read at the recent graduation of Miss Burritt's Normal Kindergarten class, 15th and Race Sts., Philadelphia.

he is "despised and rejected of men, reviled, persecuted, spit upon, crowned with thorns;" yea, oftentimes "crucified," yet "when he is taken up, he shall draw all hearts after him." It is my purpose to trace a faint outline of one of these who had faith to believe, and power to prove that human beings might be educated upon other and far better principles than those which had hitherto prevailed.

On the 21st of April, 1782, in the Thuringian Forest, at Oberweiss-Loch, a village in the principality of Swarzburg Rudolstadt, was born Friedrich Frœbel. Motherless before he was a year old, his childish needs ministered to only by servants, and placed at the age of four years under the care of a stepmother, whose early kindness soon changed to indifference; ever longing with a sad intensity for the father and mother love denied him, which he felt to be his right; what wonder that the loneliness and isolation of his childhood, gained him the belief, which comes to every fine and sensitive spirit, that of being misunderstood and misinterpreted by all? To him it was a dark problem, which he vainly sought to solve—why human life should be so discordant, when tree, and plant, and flower-life was so harmoniously beautiful.

He relates of himself that, when quite a little boy, he was one day intently watching some workmen who were repairing his father's church. He collected sticks and stones, and imitated their movements, hoping to be able to build a church on a small scale. After a number of fruitless experiments, he finally gave up in despair, and says, that, young as he was, he even then thought that children should have suitable materials, and be taught *how* to work. He believed that in the deep impression made upon him by his failure to build a church, lay the germ of his endeavor to devise the Gifts and Occupations of the Kindergarten. In his biography we are told that, "before he was ten years old, he had three distinct convictions: 1. That the end of the world would only come, when everything about the earth, its forces and hidden laws, had become known to mankind, and this period he thought far distant; 2. That in striving after truth, and disputing about it, no one man was wholly right, and no one wholly wrong, and that a wise man might learn the truth, by comparing the views of both; and 3. That it was not our human nature, which made it difficult to "follow Christ;" that we had only to find the right way to live a pure life; and with this conviction he gained peace.

When he was seventeen and a half years old, he went to Jena, where he studied mineralogy, chemistry, botany, algebra, and geometry. He decided upon architecture as his vocation, but as he approached the realization of his aim, he was weighed down by doubts, lest he could not, in this calling, work toward the elevation of humanity, which it was his earnest desire to do. He next accepted the position of teacher in a school conducted after the method of Pestalozzi. He soon after visited Pestalozzi himself, but, notwithstanding the enthusiasm he felt over the results of his mode of teaching, he saw disadvantages and defects in his system. He saw that the instruction was too mechanical, that too much was *given to* the pupil, instead of being *elicited from* him. Not wholly satisfied, he went back to his teaching, persuaded that therein lay his true vocation. But, perhaps to the advantage of his own development, the position was not of long duration. Although he gave universal satisfaction, he felt the restrictions of the routine prescribed to him, and wanted freedom to work out his own ideas in his own way. He soon entered upon another situation where he had liberty to follow his own inclination. He believed, and acted upon the belief, that the right way of teaching was to live with one's scholars, and enter into all their experiences, pursuits, and pleasures. But still unsatisfied, he went again, taking his pupils with him to Pestalozzi.

Again disappointed in reaching his ideal, in 1810, he asked to be released from his position of teacher, and the following year entered the University of Gottingen, where he was led to the study of languages—Latin, Greek, Hebrew, Arabic, Sanskrit, Persian and Hindustanee. The comet of that year led him to astronomy, and he continued the study of natural philosophy, chemistry, mineralogy and botany; and later took up history, politics and political economy.

In 1812 he went to Berlin, to hear the lectures of Prof. Weiss, on mineralogy, geognosy and crystallography, and found in them the intellectual food he needed. In 1813 he received the position of assistant inspector of the Mineralogical Museum in Berlin. From a translation of his biography, I quote that, "his life was spent in the quiet halls of the museum, among the mute evidences of ever-creative nature. He perceived, even in these dead stones, torn from their surroundings, that a process of activity and formation had been going on, and saw that the Deity is present, not only in the greatest, but even in the smallest forms of life. We cannot follow his philosophical reasonings, nor how he came to his conclusions, and extended them to humanity, its development and destiny. * * * Nature and man in their widely different stages of development, seemed to him, to explain each other."

Financially, Frœbel was not successful. His nephew, Karl Frœbel, who was also one of his pupils, thus speaks of him: "Some of the wise and prudent of this world, when speaking of Frœbel and his plans, smiled and shook their heads; others called him a queer original; others, a fool. Some of us boys looked on him as a prophet. His trust in the final success of his cause, and his conviction of its blissful consequences for the welfare of society never faltered. He appeared to me a thoroughly religious man, full of love toward his fellow men, and of confidence in God."

In 1818 he married an accomplished lady from Berlin, Henriette Wilhelmine Hoffmeister. She had been a pupil of Schleurmacher and Fichte—but left her large circle of friends, and all the intellectual advantages of the city, came joyfully to the humble home of Frœbel, and proved herself an help-meet for the noble heart who had chosen her to assist him in his life-work. Many of the songs accompanying the plays for children, owe their origin to her. She was dearly loved by all her pupils and friends.

For a period of several years from this time, Frœbel's life was a series of reverses. Taken into favor by the Duke of Meiningen, who promised to aid him by the gifts of lands and moneys; and then, as is the custom and privilege of royalty, breaking his promise, on account of having listened to evil words spoken of Frœbel, by those who feared his influence with the duke. The establishment of the public Kindergartens was prohibited by the government, on the ground that they were dangerous to society, and although their innocence was made clearly manifest, the unjust decree was not revoked till some years

after Frœbel's death. Persecuted by the blind and ignorant fury of the priests, who—as it is the chief glory and delight of all bigoted religionists to do—threatened him, and all who upheld him, with "eternal damnation," his life was one long battle against the allied forces of poverty, misunderstanding, doubt, bigotry and persecution. Yet bright before his vision shone ever the light of his ideals, that of the more perfect development and happiness of mankind.

He was continually seeking means to interest and develop very young children, and finally, by slow degrees of thought and experiment, devised a regular series of objects, forming a systematic whole—each one proceeding logically from the other—which objects he called "Gifts." In 1835 the idea of the Kindergarten first occurred to him. In the following year he wrote a paper entitled, "the year 1836 demands a renewal of life," in which he foretold a higher and nobler development of mankind, and prophesied that if this could not be attained in the Old World, there was one spot where it would have liberty to grow toward perfection, and that spot was the United States of America.

His gifted and devoted wife died on the 13th of May, 1839. In working for the uplifting of humanity, he sought to live down his sorrow. He instructed young men and women, in connection with his "Nursery for Children," as he called his new creation, for which he had often lamented the want of an appropriate name. We are told, that, one afternoon while going over a hill, he stopped and looked down into the valley below him; his ever-kindly face took on a rapt expression, and his eyes shone, as he called out, in inspiration: "Eureka! *Kindergarten* shall be the name!"

He wished, by the use of this name, to convey two distinct ideas; one that of an enclosure in which children should be placed and surrounded, as plants are, by all natural influences needed for their growth and development, and the other, that each child should have liberty to plant, in a *real* garden, seeds and roots, and watch their gradual, regular and natural process of growth. On the 400th anniversary of the invention of the art of printing, June 28, 1840, Frœbel christened his institution. He did not, by any means, confine his idea of culture to the Kindergarten. He believed that human happiness depended on the full development of all the innate faculties of every human being. Believing also, that first impressions were the most important and the most lasting, it became his aim to educate mothers, not through books merely, but practically. In 1843 he published his book for mothers. He had long before despaired of making himself understood by men, and therefore appealed to women, who naturally have charge of the earliest education of children.

In 1849, he became acquainted with the Baroness Bülow—a woman of genius, and occupying a high social position. She had heard him spoken of as the "natural fool." One day, while walking with a friend, she for the first time met him leading a troop of poor children, with whom he was playing and singing. His kindly face, set in a glory of gray hair, his loving and patient bearing, brought tears to her companion's eyes and her own; and she said, "This man is called a 'natural fool;' perhaps he is one of those rare beings, who in their lifetime are ridiculed and stoned by contemporaries, but to whom future generations build monuments."

Prophetic words, long since fulfilled! Some of Frœbel's ideas were so far beyond the common comprehension, that it is doubtful whether those who listened fully understood him, but they could not fail to be animated with the spirit of enthusiasm—the God within—which warmed and vivified his words. If, at times, his mode of speech was mystical, strange and dark, in the Baroness Bülow he has found a faithful and true interpreter. From the time of her first meeting with him, she never ceased to be his friend. She made his thoughts her own, and expressed them in clearer language than he had the power to do. She has done more than any other one of his friends, to place his ideas in a perfected form before the world. The last years of his life were passed under a cloud; but his friends, a faithful few, stood by him to the end. Glad to bridge over the darkness of his days with a ray of light, on the 21st of April, 1852, they, together with his pupils, joyously celebrated his 70th birthday, brightening it with flowers, poetry, and song.

Soon after this he wrote long replies to attacks on his system, caused by the prohibition of the government, and seriously injured his health. His last days were peaceful and happy. His friend, Middendorff, who stood by his death-bed, said of him, "It is evident that Christianity is the root from which his life proceedeth." On the 21st of June, 1852, he left the earthly warfare, and entered into rest; and on June 24th, the weary tabernacle that had sheltered the great and loving soul, was reverently buried. "After life's fitful fever, he sleeps well."

A fine sarcasm is conveyed by the fact that notwithstanding Friedrich Frœbel, while living, underwent all kinds of persecution for the sake of his system; now that he has risen too high for the sympathies of men to reach him, the symbols of his "second gift"—"the sphere, the cube, and the cylinder," should adorn the cold and senseless marble of the monument erected to perpetuate his memory! Shall it not be, when time has crumbled monument and symbols into dust; when a higher civilization and enlightenment—a nobler purity and a more enduring virtue—shall prevail upon the earth, having been brought about by the knowledge and practice of the laws of the system which he spent the years of a long life in perfecting; that in the hearts of yet unborn millions, a truer and more fitting monument shall rise—a monument of ever-increasing reverence, gratitude and love; adorned with the pure flowers of Faith and Hope, whose fragrant incense shall float ever higher and higher, in honor of him who shall henceforth be classed among the truest benefactors of the world?

"Lord keep his memory green!"

Pestalozzi was a true reformer in education. All honor to him for being the first in history to call upon the mothers for help! He thought they should have sole charge of their little ones, until they were six or seven years of age, taking it for granted, that as the Creator had seen fit to entrust to their care the "unspeakable gift" of children, the mothers were all, therefore, of necessity fitted to train them. He said, "I will make education the basis of the common, moral character of the people, and will put the education of the people in the hands of the mothers."

His aim was to bring instruction into harmony with nature, but Frœbel said: "Our greatest educators, not excepting even Pestalozzi himself, allow themselves *to be led away* from nature and nature's laws." Far beyond all these Frœbel advanced. He alone sought and found, *in the child's own nature*, the *law of his*

education. He realized that the majority of mothers were unfitted for the sacred task of developing truly the little ones God had given them. That the sphere of the family was too small to afford them a true education. That its restrictions would not prepare them for life in its true sense. He believed that children should associate with each other, in order that they might experience, in little, the varied phases of the larger life which awaited them. That by this means the growth of body, mind and soul would be harmonious, and that they would educate themselves and each other. He was the first to utilize the ceaseless activity of childhood, not by repression, but by gently wooing, leading and directing its free spirit to love and accomplish its work.

He believed that Play was the normal, natural and appropriate business of childhood. He saw that all healthy children played—that this play was the means of their development—that by it they learned the use of their bodily powers, and so gained health and strength, and that in this way they learned the qualities of objects; finally, that Play resolved itself into Education.

His idea, ever present, was gradually to transform their play into work which *seemed like play.* He believed, with the divine Plato, when he says: "From the first years the plays of children ought to be subject to strict laws, for if these plays—and those who take part in them—are arbitrary and lawless, how can children ever become virtuous men, abiding by and obedient to law. If, on the contrary, children are early trained to submit to laws in their plays, the love for these laws enters their souls with the music accompanying them, never leaves them, and helps in their development." And again, "I say that it has been hitherto overlooked in all states that plays have the mightiest influence on the maintenance or non-maintenance of laws, for if the plays are conducted according to laws or rules, and children always pursue their amusements in the same manner, and find pleasure in it, it is not to be feared that they will break laws, the end of which is more serious."

Frœbel makes play, then, a most important feature in the Kindergarten. Again, he saw that children were always busy, also that they were spontaneous—that the activity and spontaneity made their happiness, which was happiness because produced by their own efforts. What children *do* interests them. A favorite saying of Frœbel's was, "The world is sick with thinking, and can only be cured by acting." So in the Kindergarten, it is activity that is the essential thing.

Mind and hands work together. By the constant use of the hands in play they are prepared for future work, for all kinds of which the cultivated hand is requisite. Frœbel connects all instruction given with the use of the hands. By using *objects* as material for work, their properties and powers are learned. Pestalozzi, indeed, used objects as the subjects of lessons, and thought that nothing should be treated of, except in a concrete way. But the great difference between Pestalozzi and Frœbel, lies in the fact that while the objects used by the former appeal to the eye alone, Frœbel's Gifts are touched and handled, at the same time they are seen. Children in the Kindergarten observe, because they are constantly trying to re-produce, and if the result of their efforts is not satisfactory, they learn to observe objects more and more carefully. Their unspoken motto is, "We learn by *doing.*" Is it possible for a child's knowledge so obtained to be superficial?

If then, before they are ready for school-life, children are placed under the careful guidance of conscientious persons, and surrounded by such genial and beneficent influences, as shall silently but surely become the means of their instruction, at the same time insuring their happiness; if in rooms bright and cheery with sunshine, fresh air, flowers and song, these older persons themselves "becoming," for the time, "as little children," join with the *real* children in such gentle and appropriate exercises and plays, as shall promote their health and strength, and give their activity meaning; if by play and work with the Gifts, they learn the qualities of objects, and learn *thoroughly*, because they learn by actual work; if without physical or mental strain, they gain skill in handiwork, by the regular exercise and cultivation of their constructive powers; if their imagination, inventive and reasoning powers are daily brought into use; if any latent aptness for future intellectual attainment, artistic talent, or manual skill is awakened and encouraged; if minds, instead of growing awry, learn to preserve a proper balance; if sound minds are housed in sound bodies: if body, mind, heart and soul are developed in harmony; if health, strength and quickness, gracefulness and ease of movement, and habits of order, precision, attention, observation, concentration, application and correctness are acquired; if they are taught the right use and command of language; if they are educated and instructed; if they become polite in manner, obedient in wish, and kind, gentle and considerate in feeling; if they have learned to love the Good, the Beautiful and the True; if in becoming thoroughly prepared for school-life, they have also received a preparation for *all* life in its broadest sense; if they have learned to make of all play, and all work and life, a religion; if they have had created within them a hatred for all shams, and a love for all truth; if the germs of their spiritual life have been ministered unto by such holy and true influences, as are needed for their growth into good men and women: is the task of the Kindergarten one to be lightly undertaken, or lightly thought of?

The Kindergarten, then, because its methods, contrary to those of the schools, proceed in a natural, rational manner, is seen and acknowledged by all who are unprejudiced, to produce beneficial results; hence, it is becoming popular, and in every direction you will see, springing up like mushrooms, growths of a single night. The persons who are at the head of these have undertaken the work from widely differing motives. Some, perhaps, with an earnest desire to do good; others, through ignorance; still others, from mere mercenary considerations, have taken the name of a system, the principles of which they have never troubled themselves to inquire into, and with a kind of sublime-ridiculous confidence, have put up their signs and labeled their wares, like the rest of the quacks, with whom the dear blind people love to be humbugged. For a time the glittering semblance of reality charms the eyes; for a time it *seems* to succeed, but very soon the earnest-minded people begin to look below the surface. How shall they be enabled to distinguish between the false and the true Kindergarten? I have already spoken of the true, and will now indicate some of the signs of the false.

Bear in mind that the instruction of the Kindergarten should always precede that of the school, and be a thorough preparation for it. But it is not itself a school, and does not in any way profess to take the

place of one. Therefore, if you enter a room, and find children reading, writing, spelling, or repeating the multiplication table backward; or if in the study of the "form" they have grown prematurely deaf, or been thrown into a state of semi-idiocy, by long listening to the pitiless sound of such words as "parallelogram, rhomboid, trapezium, trapezoid, polygon, pentagon, hexagon, heptagon, octagon, nonagon, decagon, equilateral, isosceles, scalene, polyhedron, hexahedron, tetrahedron, octahedron, dodecahedron, icosahedron," etc.; or if you find them standing in a row, repeating Bible verses, to the effect that, "The Lord is angry with the wicked every day"—be assured that you will have to look further. In your search you may find houses that are "beautiful for situation," with gilded signs to tell you that here is a genuine Kindergarten, and although without is a real garden, watched over by children, though flowers fill the bay-windows, and Frœbel's "Gifts" occupy the book-shelves; yet, if these Gifts are thrown around promiscuously, and no order observed in their distribution or collection; if the children's mats are woven by pattern, and not by direction; if in one corner a boy is declining Latin nouns of the second declension; though you may listen to beautiful stories, three or four of a morning; you may be interested, amused and instructed: yet do not for a moment imagine that you are in a Kindergarten.

Furthermore, by all that is right and just, by all that is good and true, by all that is holy and pure, when you find that children are taught (as in some cases I positively know them to be), that every moment of their lives they are surrounded by an evil spirit, I adjure you in the name of all that is holy and divine to look not once behind you, but flee from that house as you would flee from a pestilence! Just God! Is not the time almost over when children's lives shall cease to be cursed with such horrible doctrines? Little sparks flashed out from the Divine fire of the Eternal Spirit, pure from the unseen world, till they enter the one impure and seen—are they forever to be smothered to death in the cold ashes of hearts burned out with evil thoughts and lives?

What! teach a child, an innocent child, with its great, pure, wondering eyes looking fearlessly into yours, seeking the truth, that he is surrounded by an evil spirit! When every blade of grass that waves, every trembling leaf that beckons, every fragrant flower that blooms, brilliant birds that flying sing, bright-winged butterflies that shimmer and float, sun, moon and stars that shine, winds that love to touch his soft cheek, all are thrilled and divinely pervaded with the living spirit of the one and only Good! Will you dare to teach that the devil is greater than God? And then remember who it was that "took a little child, and set him in the midst of them, and said, Except ye become as one of these little ones, ye can in no wise enter the kingdom of heaven."

"Woe unto him who offends one of these little ones for I say unto you, their angels do always behold the face of my Father."

In the book on the Child, translated by Madame Kriege, we are reminded that all animals, man alone excepted, are possessed naturally, of defensive weapons. Man had heretofore been accustomed to procure with his hands the weapons he deemed necessary forhis defense. Might not the fact of his being without a natural weapon, be meant to signify that the ha nd was to be used for nobler purposes,and that the mind denied to other animals was given to him, in order that he might devise a more exalted way of settling disputes than by the use of brute force? Let us hope that when a few generations have been educated under the peaceful influences of the Kindergarten—when the hitherto idle hands shall refrain from mischief, because it has been trained to the habits and love of useful work, that there shall go out all over our land, little bands of peacemakers, little happy, healthy, useful children, whose lives shall have become so harmoniously beautiful, that men, seeing them, shall have no desire to fight.

Women, who have been taught to *think* will no longer run crazy after buttons, stars, and shoulder-straps; and men having learned to realize of what a terrible thing these are the symbols, will no longer be proud to wear them. Whenever war is recognized as a relic of the dark ages, the love for military glory will die out. When war has ceased to be popular, *even ministers* will have courage to quote those parts of the Bible which they have hitherto so often *failed* to dwell upon. "Thou shalt not kill," and "thou shalt not steal," and "thou shalt not bear false witness," nor break any of the other commandments; will not then, as now, be tortured into meaning, "Thou shalt not kill, steal, lie," nor do any of the other things forbidden in Holy Writ, except when convenient—even in war.

Since it is vain to wish to go back to childhood in order to enjoy the advantages of Kindergarten culture, the next best thing is to watch over and help the development of other little children. I would that a Kindergarten might be planted on each and every inhabited mile of this old earth's surface. I would that no little one were so poor, or neglected, or sad that it must be shut out from the holy enclosure. Then, indeed, would the time hasten for which we all hope and wait. Then would wars, and stripes, and murders, and crimes of all degrees, be forever swept from earth. Then would we witness the world's regeneration. Then shall dawn the bright millennial morning, when joyous spirits shall "ring in the thousand years of peace." Then the Christ shall dwell on earth. All hail the happy day, and heaven swiftly speed it!

And now to our instructors, who has so earnestly and faithfully labored in imbuing us with the true principles of the Frœbellian system, I would say that while we are careful not to neglect the letter of those principles, I trust we shall be enabled to abide ever in their true and living *spirit*, not only in the Kindergarten, but in the larger garden of humanity as well.

And, my classmates, who have enjoyed with me the wonderful and beautiful unfolding of this system, let me write the hope, that the true bond is not a frail one, nor to be easily broken, that is to bind us together in the faithful performance of the duties that have opened to our cleared vision. Whether near or far apart, let us not lose sight of each other, let us communicate our plans for work, and fail not to give to each other, in due season, the needed word, whether of help, counsel, sympathy, or congratulation. The world is afraid for us to preach, it is afraid for us to vote, it remains to be seen whether it is afraid to allow us peacefully to educate the children.

Let me close in the words of another: "Not the warrior, Ambition; not the giant, Legislation, but the little child Love is to lead in the Golden Age. She is the best woman, who does most to hasten the inauguration of that divine Child!"

A YEAR'S EXPERIMENT IN PRIMARY TEACHING.

MRS. LOUISA P. HOPKINS.

I HAD the good fortune, at the opening of the last school year, to receive a class of little girls, whose only previous school training had been in a well-conducted kindergarten. Of course they were wide-awake, and fresh for study; they made about half of a class of girls, of from eight to fourteen years of age. We studied United States history, with Higginson's text-book, which we read, reviewed and discussed, until I think they had quite a clear vision of the course of events in this country for two hundred years; certainly they were thoroughly interested in the subject, so that they listened eagerly to any additional details or accounts I could give them, reading three or four interesting books on the subject of the earlier history, and examining the pictures in Lossing's Field-books, and Catlin's "North American Indians;" they also read, of their own account, other fragmentary histories, or tales, in connection. We went through Dickens's "Child's History of England" in the same way, with a great many illustrations from various sources. We had the prominent points of Greek and Roman Mythology in oral lessons, reading aloud most of "The Age of Fable," of which excellent abstracts were written, *con amore*, making an exercise and study which proved most fascinating to them.

We reviewed "Miss Hall's Primary Geography," which had been read to them at the kindergarten, and with globe and photographic views kindled their interest to a flame, and passed on to the higher geography, which we prefaced with oral lessons in astronomy, and made our way nearly through the geography of the United States, committing the text to memory, and drawing maps, but occupying ourselves chiefly with imaginary travels and plays at trade and commerce, until the unity and interchange of different localities and countries were well understood, and we found unfailing zeal and vivacity pervading the recitations.

Elementary grammar was evolved from their own unconscious knowledge of the language; and when their statements were put in systematic order on the blackboard, I showed them, to their surprise and delight, that they had already known all that was contained in "Greene's Introduction," and could parse any sentence not too complicated for their perfect comprehension. Who that had seen their enthusiastic joy at this discovery, could have remanded them back to the old tread-mill of grammar lessons? Dictation exercises and composition they became very fond of, under somewhat the same method of instruction.

Reading and spelling we kept up a constant exercise in, and by every conceivable variation of means, especially dwelling upon exact enunciation, and natural expression; and we had weekly recitations in good poetry, which were attended to carefully, with some instruction in elocution.

As to mathematics, we had mental exercises as often as seemed advisable, but it was necessary to restrain their excitement by irregular attention to it, though they became very quick and skillful in rapid calculation. We studied numeration, including, of course, decimals, and addition, subtraction, multiplication and division, applying these fundamental principles to parts of numbers, as well as to simple and denominate numbers, thereby covering the subjects of fractions, decimals, United States money, compound numbers, metric system, and simple algebraic quantities. We took up percentage, and some of its applications, where the close of the year left us, having treated the subject thus far as simply varied applications of the rules of numeration, addition and subtraction, always deducing the rule from a clear comprehension of the method. I need not say that all thoroughly enjoyed the study, and are anxious to go on.

The spring and summer term we devoted to the study of nature. The children became quite familiar with "How Plants Grow," with which they reviewed botany, after oral lessons on Miss Youmans's plan, analyzing flowers readily, and enjoying much of the higher and more delightful developments of the study, which they remembered after once learning: *e. g.*, the propagation of the orchid; the properties of tendrils; the multiplication of cells, etc.; for it is the opening of these intricate and beautiful vistas before them which most excites their thirst for investigation.

We studied the forest-trees of New England, through Mr. Emerson's book and by walks into the living woods, and examination of specimens. We absorbed all that "Morse's First Book of Zoology" could give us, also Mrs. Agassiz's little book on Sea-shore Curiosities, besides reading works on land snails, butterflies, and other insects.

We had oral lessons, well reviewed by written abstracts, and drawings from "Land and Game Birds of New England," so that summer found us with our arms stretched out, and our eyes and hearts and minds open to embrace her beauties of wood, and field, and sea-shore. Physiology was thoroughly studied as far as is usual in our high schools, and proved not at all above their comprehension and lively interest.

Drawing was practiced successfully, under a special teacher, and some of the class developed a decided love and taste for it, making copies of flowers or animals which were quite worth mounting and using as gifts.

Besides these English branches, they all learned to talk French, with a charmingly pure and correct accent, under a native teacher, whose manner was most inspiring to the class; they went nearly through Sauveur's "Causeries avec mes Enfants," and learned a few of Fontaine's fables by heart, conversing about them easily with their teacher. They could play a French game quite prettily and intelligibly, and learned by rote the auxiliary verbs, and verbs of the first conjugation. They studied German by much the same method, finally reading with considerable ease and delight, "Grimm's Tales," in the original.

This is a careful, and not overdrawn summary of what was done from September 15 to June 15, inclusive, with a class averaging about ten years of age, with very little out-of-school study, and great enjoyment. Our promise for next year is to continue French, German and drawing, commence Latin and general history, take up astronomy and uranography in oral lessons, and continue geography with Miss Hall's work, making it coincident in outline with our study of history, as was, I am told, Miss Hall's original plan for her book. We shall go as far with the details of grammar and the construction of the language as the interest and intelligence of the class can be led, and introduce them to the study of English literature. We shall continue mathematics, including arithmetic, algebra and geometry, only as far as they can see the reason for the method of operation; for I by no means agree with President Hill, in giving children rules to learn without the idea which informs them, or leading them blindfold, by painful steps, to the temple of learning. We shall pursue spelling, reading and writing by constant but not tiresome drill, and, with oral lessons on various subjects bearing on their main studies, I hope to advance the class as much in love of study, desire to learn, development of their faculties and attainment of knowledge, as I feel confident has been done in the past year.

I should not omit to say that no constraint of any kind was ever put upon the children to secure their effective attention and study, or for their good behavior; no motive of emulation was introduced, to urge them on at the expense of their love for each other; no rules of manner or morals were given them, except those they voluntarily deduced from what they saw to be the necessary conditions of attentive study and good manners. I am free to say, in recommendation of this method of education, that it awakens and develops the mind and character, and stimulates the love of learning to an unusual degree; and I cannot resist the conviction that to inspire the young with enthusiastic desire to know all that God has offered to their comprehension, to give their powers full play in all these infinitely radiating channels of study, making learning a delight, in some cases almost an ecstasy, is more conformable to the plan of nature in the development of a child's being than such course of drudgery and return to the husks of educational training as President Hill recommends in a recent article.

Primary Teacher.

GERMAN UNIVERSITY COST.

GEO. E. HOWARD.

FIRST, what preparations should be made for such an enterprise? No one should think of pursuing a course of study in Europe until he has mastered a thorough college course in his native land. The so-called "classic course" is preferable to the "scientific," as a foundation. Latin and Greek play a great part in the form and medium of instruction here.

Practically, for the actual journey make as little preparation as possible. Take nothing with you except a moderate sized traveling case. A trunk on the railroads of Europe, inclusive of hack and porter fees, will cost as much as your ticket, not to mention the vexation and persecution it will cause you. No baggage except handpacks is transported free here. No passport needed.

A draft should be purchased on some city you expect to visit, else you may suffer the inconvenience of a delay of several days

awaiting correspondence. If you desire to travel continually, a letter of credit is preferable. Money may be sent by "postal order" at a cost of $1.25 for each $50. At the present rate of gold, however, the cost is a trifle more than by draft. In making exchange in Europe, always patronize large banks. With small brokers, in hotels, or mercantile houses, you will invariably lose from one to five per cent. even if you be not exposed to more serious extortion.

In reference to ocean passage the following plan is recommended. Unless you desire to visit Great Britain before seeing the Continent, take a ship for Antwerp or Rotterdam. Buy your ticket in the "general office," in the port from which you sail. Buy your ticket from port to port. Should you take a through ticket to some point in the interior you will find yourself at the mercy of railroad companies, and in all probability you will be delayed days in making the proper connections and yet be so far fettered as to be unable to view the objects of interest along your route. Purchase nothing higher than a "second class" or "intermediate" ticket. Indeed, if you purpose to observe strict economy—which is taken for granted in your case—take a "steerage" passage. The cost of a steerage passage by the Red Star Line to Antwerp is only $23, while the cost of second cabin is $60.

On the continent, travel third class, both by rail and boat. You need not be at all alarmed about your *dignity;* the great mass of the traveling public journey in this manner. You will have as your neighbors in the third-class coach representatives of every grade of society, from the fat *Bauerinn*, or peasant woman, with her market basket, to the learned professor with wife, son, and daughter. The rates of fare are about one, two and three cents, respectively, for third, second and first-class. To be sure, the cars are rough and uncomfortable, but then it pays! By rigidly observing this one point alone, you will lessen the whole expense of your tour by a third. Never purchase a "through ticket" across the line from one country into another. It is usually 20 per cent. cheaper to purchase tickets from boundary to boundary. For example, a through ticket from Vienna to Munich costs but four marks more, than to take a ticket to Simbach on the Bavarian line and then renew to Munich. Here comes the tug of war! How shall one safely run the gauntlet of cabmen, guides, and hotel-extortions? The best way to deal with these caterers to your comfort, is to have nothing at all to do with them. Provide yourself with a good guide-book; *Baedeker* is still classic. It will always be an advantage to purchase the text in the language of the country in which you travel, if you yourself are master of it; thus you will find yourself in possession of the proper local designations for the objects of interest. A careful study of the guide-book, together with a good map, will make you independent of all assistance on the part of guides.

On reaching a city deposit your traveling bag with the porter, who, for a fee of five cents, will become responsible for it until you return. Thus freed from all luggage, launch forth into the heart of the town. Read over the list of hotels in your book, but be sure to avoid them all. Never patronize hotels; they are too expensive for you. Search out a modest looking "gasthaus" or inn, and apply for lodgings. Don't be frightened by its external appearance; you will generally find a neat, quiet room, a clean bed, and substantial consolation for the inner man, at one-fourth the usual hotel rates.

Always bargain beforehand for everything, from a sheet of letter paper to your lodgings, and then pay for the latter in advance; for even a distinct bargain will avail you but little, without this latter precaution.

What University should I select? The South German cities are, on the whole cheaper than those of North Germany. One can live, for example, at less expense in Munich, than in Berlin or Leipzig. For you, however, there is no perceptible difference. One hears often that the language of the North is purer than that of the South. As to the language of the lower orders this may be true, but so far as a student learning the language is concerned there is not a particle of difference. Those with whom he associates will speak High German. Spend a season in both North and South Germany by all means.

You should adopt the life of the German student, in its main features. In every university town are rooms for rent, designed especially for students, which are plainly furnished at a cost of fourteen to fifteen marks (one mark—25 cents) per month in Munich, for which one can obtain a comfortably-furnished room, including service. The German student takes his breakfast in his room. This is extremely light and plain, therefore all the better adapted to his sedentary life; a cup of coffee with a couple

biscuit. His supper is of a similar character, either taken in his room or picked up at random; for example, he purchases a few pfennigs' worth of cold meat, or sausage, from a charcutrie, which, together with a glass of beer and a piece of coarse rye bread, constitutes his repast. The student's dinner is his substantial meal. This he obtains in one of the numerous gasthäuser, whose bill of fare is designed expressly for the inevitably slender purse of the average student. In the Schelling Saloon, a popular students' dining hall in Munich, the dinner costs sixty pfennigs (fifteen cents) including a pint of beer at three cents. Thus, with strict attention to your principles of economy, your board, together with room rent, fuel, washing, and light, will not cost you more than $140 per annum. In addition to this, your fees in the university, including marticulation, will amount to about $25 or $30. The cost of clothing is about three-fifths American prices. Hats and shoes, however, are dear, and the latter of inferior quality. Books are extremely cheap. All general literary and classic works cost about one-fifth American prices. A well-bound volume of Gœthe or Schiller costs about twenty or thirty cents. New scientific works and text books are dearer than in the United States. English books can be procured at less than home prices.

The following programme of study and travel, tested by personal experience, I unhesitatingly recommended to those who are willing to pursue the same course. Select Munich as the scene of your first year's study. Land at Antwerp, and spend two weeks viewing that city, Brussels, Aachen, Cologne and other points along the route to your destination. Spend the first year, beginning with the winter Semester on the first of November, in the diligent study of the language in the university. In the summer vacation of three months, make a four weeks' trip through the German Alps and to Vienna. Return to Munich, and make a tour of equal length through western Germany and along the Rhine. During your second year, spend three weeks in Italy.

All of this can be accomplished at a total expense for the two years of $575, books and clothing not included. STUDENT.

Munich, Dec. 10, 1877.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, APRIL, 1878.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

THE following is an extract from a letter from General Eaton, United States Commissioner of Education, acknowledging the receipt of a copy of the late report of the School Department:

> I have kept the magnificent volume from your office for 1877, at my hand for examination as opportunity offered since it came. It is very rich in material, is a grand memorial of Pennsylvania, and well befits the close of the century. Its careful collation of facts will, I have no doubt, increase in value as the years pass by.

THE Free Academy of Rochester, New York, is about to be abolished and a grammar school established in its place. There are now three hundred students in the Academy, and all these, if they desire to continue their studies, must do it at their own expense. This may do very well for the rich, but what is to become of the poor? Is this the kind of fruit Gov. Robinson designs to bring forth?

J. H. BUTLER, Esq., the senior partner of the firm of J. H. Butler & Co., Philadelphia, died at Northampton, Massachusetts, March 10th, aged 72 years. Mr. Butler has been engaged in the publishing business since 1832, and, in connection with his brothers, probably no family in America, save the Harpers, has had so long and so successful a career in the book trade.

"It is a remarkable fact," says the *N. E. Journal of Education*, "that five sons, five grandsons, and one great-grandson, have followed in his steps as bookseller and publisher. His reputation as a business man has been an honorable one, and the old town of Northampton, Mass., has reared no worthier family than that of the Butlers."

THE article on Frœbel and his Work in this number was written by Miss Anna W. Barnard, an enthusiastic Kindergartener.

Miss Barnard, as her essay shows, is a lady of culture, and she has had considerable experience as a teacher. She was at one time engaged at Swarthmore College. Let no reader of THE JOURNAL overlook this article. It contains valuable matter for all interested in education. No teacher can be considered fully equipped for his work without an acquaintance with Frœbel and his work.

MR. C. C. TAYLOR, Superintendent of Erie county, will hold his annual institute at North East, in the L. S. Seminary, commencing May 13th.

A CONVENTION of the friends of education was recently held in Atlanta, Georgia. The main object of the meeting was to aid in securing the passage of the bill now before Congress devoting the proceeds of the public lands to educational purposes. Hon. G. J. Orr, Superintendent of Public Instruction in Georgia, presided. All but two or three of the Southern States were represented. Dr. Sears and Gen. Eaton were present. Resolutions were passed in accordance with the object of the meeting, and a committee was appointed to memorialize Congress on the subject. Several appropriate addresses were delivered on the condition of education in the South, and a day was spent in visiting the schools of Atlanta.

IN the Reading *Eagle*, of March 1, Louis Richards, esq., supplies some omissions in Supt. Baer's report concerning the services to the school cause of the late Hon. John S Richards. He states that Mr. Richards was from "the very foundation of the free school system of Pennsylvania one of its most zealous, active and valiant advocates and supporters," and this we are free to say does him no more than justice. Mr. Richards was elected a school director as early as 1842, and continued to serve as such until his death, a few years ago. He did much to extend the school law into districts in Berks county that at first refused to accept it, making many enemies thereby, but never flinching in the performance of what he conceived to be his duty. No man in the State probably fought more battles in behalf of free schools than John S. Richards. His good work for popular education was not confined to Berks county, but with other friends of the cause he was active in securing the school legislation of 1849, 1854 and 1857. Prof. Baer's admirable report would be improved, by supplying the omissions that have been pointed out in the case of Mr. Richards.

IN stating last month that the Attorney-General had decided that the office of county superintendent was not a county office within the meaning of the new constitution, and that conventions of school directors might go outside their own counties or districts to find the right man for the place, it was in no wise our intention to encourage these conventions to look abroad for persons competent to fill the office when those as well qualified are to be found at home. Other things being equal, we would advise the encouragement of home talent. We would even waive something in the matter of scholarship in a superintendent, if we could get a man acquainted with home ways, and in sympathy with the people among whom he is called to labor.

Besides, it may be proper to state that no one is eligible to the office unless he possesses the evidence of competency required by law in the county where chosen.

A word of warning is, perhaps, in place here to those who may think of being candidates for the office. It will probably be decided to be illegal for a county superintendent to engage in any business outside of the duties of his office, that will interfere in any way with their proper discharge. These officers must not expect longer to run stores, farms, schools, etc., in connection with their offices. They must prepare to accept the place and the salary with the expectation of devoting their whole time to the duties required by law. The salaries of superintendents in some counties have been heretofore so small, that it seemed absolutely cruel to enforce the law so strictly as to prevent them from adding something to their income, by work outside of the duties of their offices. But we are inclined to think that this lax interpretation of the law will be allowed no longer, and we have thought proper to make this announcement in order that those who accept the office for the coming term, with the salary fixed by the directors, may do so with their eyes open to the probable consequences.

WE have received the Spanish edition of the Philadelphia *North American*, 20,000 copies of which have been printed for distribution as a supplement to the South American journals, to be issued by them along with their regular issues for the month

of April. This supplement will reach all parts of South America, and will attract special attention to the educational and other advantages of Philadelphia and our State at large, as it is a purely Pennsylvania enterprise. We see the Keystone School and Church Furniture company represented in this Supplement. This company has already furnished two large Normal Schools in the Argentine Confederation with the Bancroft desk, as a result of their display in the Pennsylvania School Building at the Centennial Exposition; and they propose, with their accustomed energy, to increase their trade in these distant regions as well as at home.

THE following paragraph is taken from a recent address on the "Public School System" of New York, by C. W. Bardeen, Editor of the *School Bulletin:*

Laws have been constructed upon general principles. The Compulsory Act is an example. On general principles, much could be said in its favor. It is deplorable that so large a ratio of our school population stays out of the school-room. It seems reasonable that those who pay taxes for popular education, because popular education is a popular necessity, should demand that this popular necessity be met by ensuring that popular education be universal. It is not impossible that a bill wisely drawn might have been effective and useful. But the framer of the law knew nothing of our public school system. He named officers who do not exist, he made no provision for enlarged school accommodation in places where children who voluntarily come are excluded; he forgot to provide money to carry out the law, and penalties to enforce it. The Compulsory Law was a ready-made coat, too large in the waist, too wide in the back, too long in the sleeves. The few districts which put it on, took it off when they were ridiculed by the nearest county judge, and the rest of us have never undone the package it came in.

NEW JERSEY is doing what Pennsylvania ought to have done. We quote the following from the late report of the Superintendent of Public Instruction in that State:

It is with pleasure that I am able to report that a room has been secured in the State House for the display of our Centennial Educational Exhibit. The cases, frames, books and other articles are arranged nearly as they were at Philadelphia, and the whole display presents the same attractive appearance it did at the Exhibition. Parents, teachers and pupils of the State have thus an opportunity now of examining this collection of school work with more care and satisfaction than was possible, because of crowds and want of time, at the Centennial. The number who daily visit this new display of the exhibit is evidence of the permanent interest which it is likely to secure. This interest will undoubtedly increase. This collection contains the work of about fourteen thousand pupils. Those who grow to be men and women will rejoice to have an opportunity to examine the work they did as boys and girls for the Centennial anniversary of their country's history. They will examine it then with far more interest than now.

It is hoped that this exhibit will serve as a nucleus for a growing museum, where may be gathered and suitably displayed all work of acknowledged merit which the schools may desire to contribute. Thus, at all times, an opportunity would be afforded every teacher to contribute such specimens as shall serve as evidence of the character of work he is doing, and the nature of the results he is securing. No better plan, in my judgment, can be devised for stimulating and encouraging pupils and teachers in their work. A child is always delighted when he is able to do something that can be seen; and particularly so when the work done possesses merit, and is not only examined, but receives commendation. A teacher cannot offer a greater inducement to his pupils to excel, than to let it be known that the very best specimen of work done in each of the branches pursued during the year, will be forwarded to Trenton, to be exhibited along with the Centennial work. A limited amount of such work may be received now and displayed; but before any general plan is devised for securing annual contributions of meritorious work from the schools of the State generally, additional room must be provided.

TEXT-BOOK JOB IN MINNESOTA.

A YEAR ago a bill similar to the one defeated in our own State in 1875 was enacted into a law in the State of Minnesota. The editor of the New England *Journal of Education* thus speaks of its result. It is fortunate that Pennsylvania escaped the evils necessarily growing out of legislation of this character:

Educational affairs in this northwestern State are receiving a great deal of attention. A bill passed the Legislature of last winter, under which the State made a contract with a certain party for all the text-books for her common schools. The bill was in no sense representative of the opinions of the educational men of the State. It was a piece of jobbery from the beginning, and was pushed through by the efforts of the fanatics and demagogues in the Legislature. It was expected that a mammoth printing establishment would be set up at the capital, and that the profits would be large and certain, as the State herself would be the sole purchaser. But grave defects in the law appeared. All efforts on the part of the contractor to get the machinery in motion were futile. In the first place, it turned out that there was no intention on his part of manufacturing a book. On the contrary, he at once sought to enlist some established publishing house in his scheme. This plan did not meet with success. The law itself was so loose in its phraseology, and the payment on the part of the State so uncertain, that publishers declined to have anything to do with the scheme.

Finally, however, late in the fall, the contractor succeeded in obtaining a series of books, which were presented to the commissioners appointed under the law to examine the books, and were accepted by a majority of their number—the State Superintendent

voting in the negative. The series is one which never met with success. It consists of books made to order by one of the machines kept by publishers for that purpose. Teachers did not want them, agents could not sell them, and the publishers grasped at the contractor's scheme for forcing them upon the schools of the State as being an easy way of selling their unpopular books. But they are likely to fall short of their expectations. Public sentiment has been aroused by the imposition, and the Legislature now sitting has been overwhelmed with petitions for the modification or unconditional repeal of the law. Superintendent Burt, in his report, sets forth his reasons for voting against the books. This drew replies from other members of the commission, from the author of the books, and from the contractor. To these Mr. Burt gave decided treatment. He substantiated his position by direct proof, and by the confirming testimony of the leading educational men of the State.

Meanwhile legislators began to see that they must heed the strong and growing wave of public opinion, against the measure. It is still undecided, but the prospects are brightening. The leading papers, which have been silent, or cautiously favoring the contractor, are beginning to see where they must plant their feet. It is regretted by all that so little opposition was offered to the project last year. In Wisconsin a similar measure was killed by the prompt and fearless course of Superintendent Searing. It was the same story of the printers and jobbers at the capital, longing for the fat of a huge State establishment. Had Mr. Burt set his heel upon the matter in its infancy, as did Mr. Searing, Minnesota would not have been disgraced by the law and its consequences. But, considering the gallant fight which he is now making, the people are disposed to overlook the delinquencies of last year.

The latest development is a proposition from all the leading publishing houses to bond themselves to furnish any or all of their books to the districts of the State at prices as low, or lower, than those named by the contract under this law. This is a powerful argument against the law.

INDUSTRIAL EDUCATION.

THE following letter, written by Dr. A. L. Kennedy, President of the Polytechnic College, Philadelphia, contains views on industrial education well worthy of consideration:

POLYTECHNIC COLLEGE, *Feb.* 25, 1878.

Prof. J. W. BRAIDWOOD, *Chairman, etc., Committee on Industrial Education, Vineland, New Jersey.*

My Dear Sir,—I have pleasure in complying with your request for my "thoughts" on the proposed introduction of industrial education into the system pursued in Vineland—a proposition that speaks well for the progressive spirit of your citizens. Such education was so little known twenty-five years ago that in order to enlighten the people as to its objects and methods we had to begin at the top and work downwards. A college was therefore established without preparatory schools as supporters, thus inverting the proper course of construction. But times have changed. The enlightenment of the people on the subject is now so great as to encourage you to lay the foundation, and then as time and circumstances may permit, to perfect the structure. The foundation I need not inform *you* to be general instruction in *Drawing*, pupils to begin as soon as they are able to learn to write. The cost of the instruction may be reduced to the minimum by giving it from the blackboard to classes simultaneously; each pupil making his or her own scale on stiff paper, and drawing to that scale from a sketch made by the teacher on the blackboard, from one of a set of copies furnished her for the purpose.

Plain designs for textile fabrics, screws, pinions, and the simpler elements of machines, are good subjects, when represented divided into squares, the size of the squares being given; and if pupils be required to indicate the points of a curve by dots, and then to join these carefully, the exercises become both free-hand and mechanical. A few copies in addition to the set will be needed to hand to pupils who hurriedly finish their exercise, in order to keep them busy until the remainder of the class shall complete it. Outline drawing from models beginning with the symmetrical solids, set up in full view of the class, naturally succeeds that of the skeletons, and to this again succeeds line shading with pencil and pen.

To carry industrial education thus far involves little expense for materials, but much care in the selection of teachers, who must add a knowledge of drawing to their other acquirements. The number thus accomplished is limited, because drawing has never had the prominence it deserves in our Normal Schools, and the graduates have not had the necessary training. How far it would be practicable to train your present school teachers to make the blackboard sketches and give the instruction in object drawing and shading, you can determine better than I. Possibly there is yet time to form a normal class and prepare a majority of its members for the work before your autumn session begins; vacancies being supplied by new appointments made after advertising the new requirements.

From one to two hours of the pupil's time per week would be ample for the proposed instruction, if given in all your grades of schools, and with those schools I think that *free* industrial education should terminate. If carried further it should be open only to those who have proved themselves possessed of decided talent, and it should at least, in part, be provided for out of a fund other than that of the common schools. A fund raised by subscription and insured by a small fee from each pupil might well constitute the basis for a special industrial school. In this school the number of hours devoted to hand work would be made to approximate more or less closely to those devoted to study. The studies would be Mathematics, Experimental Science, and Natural History, and the hand work Designing, Engraving, Wood Carving, Modeling in Clay and Plaster; and finally would be added the multiplied operations of a complete Machine Shop. The products to be sold and the sums received from them applied to the maintenance of the school.

If you begin the work of preparation now, and pursue it with your accustomed energy, you will be able in September to introduce drawing into all of your lower schools in which writing is taught, and you will have obtained some subscriptions towards the industrial school. With the advance of the first pupils into the division above, and the further introduction of Drawing, the faith of the people in the wis-

dom and value of your work will grow; and by the time you have a class of youth of talent and acquirements ready for the industrial school, the remaining funds necessary to open it will be obtainable.

Such are my "thoughts," and I have pleasure in placing them at your service. I am fully aware that they are *not new*. I have expressed them the more freely, because in educational measures success depend so much upon the nice adaptation of details, and because I heartily wish yourself and committee success in the good work upon which you have entered.

Very truly your friend,

ALFRED L. KENNEDY.

SCHOLASTIC MANNERS.

THE subjoined keen animadversions are from an influential foreign journal, and were called forth by an incident in a foreign country; but we feel assured they will be none the less interesting on that account. And, with such modifications as will occur to the ingenuous and reflective reader, many very serviceable applications of the strictures of the London journalist may be made among ourselves, both in our colleges and common schools. The idea that in order to be "high" it is only necessary to be "impudent," (as our English contemporary expresses it,) is by no means confined to the British intellect. It would be well for us, as a nation, if there were among our own journalists more of the outspoken independence displayed by the editor of the London *Court Circular*.

UNDERGRADUATE AND UNDERBRED.

We cannot agree with a Conservative contemporary that the undergraduates at the Oxford Commemoration did not transgress the bounds of decorum when they broke out in the theatre, last week, like wild bulls of Bashan, against unfortunate gentlemen who had chosen a particular form of coat or hat. We have long thought, with the authorities of the university, that these demonstrations are disgustingly brutal, and ought to be punished by the exclusion of the offenders. Any gentleman, young or old, don or under-graduate, is sensible of the distinction between innocent fun and painful—because pain-giving—practical jokes. The genuine humorist makes the very object of his witticism laugh as loudly as the rest; the splenetic satirist, like a wasp, stings from sheer malevolence, and in order to inflict annoyance.

Thus, there is no harm in proposing—is it a toast or a sentiment?—"The ladies in pink," "The ladies in blue," "The chaperons," and the rest of this very "old negro" nonsense; but were we ourselves to be assailed from the gallery with cries of "Are you not ashamed of yourself, sir?" and "Turn him out," our impulse would be to retort both by word and deed—to reply *viva voce*, "No, but I am heartily ashamed of *you*,"—to "turn out" the coward himself, if the coward were within reach. Blackguardism like this is below the level of the cock-pit, and it will be a dereliction of duty if the authorities of the university do not prevent its recurrence. The poor gentleman in the peculiar hat is said to have blushed for shame; but the rubescence ought rather to have been the result of righteous indignation. A friendly "don" might have whispered in the ear of the victim the words of Horace,

Pudor, inquit, te malus angit,
Insanos qui inter vereare insanus haberi—*

and afterwards called out, as *ex cathedra*, to the vulgar bullies above—

Audire, atque togam jubeo componere.*

We might perhaps, pardon these foolish boys, who probably mean no harm, but we cannot excuse the elder and graver people who encourage, by their laughter and their sickening notices in the newspapers, these ebullitions of Oxonian billingsgate. The fun is "fast" and furious. Stunning noise supersedes sense, and for Attic salt is substituted Spartan vinegar! What the strangers, and especially the foreigners, can think of the exhibition, may be surmised. Theories about "boys being boys," and "young men sowing their wild oats," must be resolutely protested against and refuted. We would advise the butts of these underbred undergraduates—below the rank of horse-jockeys in manners, and only "high" as they are "impudent"—to provide themselves with good oaken cudgels, and freely resort to the *argumentum baculinum* at future competitive trials of skill in the "science of language" taught on the Thames and the Isis, by unfeminine fish-fags and beardless hobble-de-hoys!

VALLEY FORGE CENTENNIAL.

THE following notice will explain itself. The plan is to raise a fund with which to purchase the house at Valley Forge in which Washington had his headquarters during the memorable winter of 1777–8. The house is still in a good state of preservation, the writer having seen it within a short time. We understand from Mrs. Holstein, Regent of the Association, that a circular will be sent within a few days to every Superintendent in the State, inviting his co-operation and that of the schools in his district. We cordially endorse the whole movement, and only wish the plan could be so extended as to embrace the purchase of the grounds on which the army was encamped, containing, as they still do, well preserved remains of fortifications, trenches and even the excavations made in the ground by the soldiers to shelter them from the cold. They are about the last relics in the field of the struggle for Independence made by our fathers—why not preserve and consecrate them forever?

*These two quotations may, respectively, be very freely translated thus:

"An ill-judged confusion troubles thee, who, being among the insane, fearest thyself to be taken for a lunatic."

And—"Listen, and behave yourself decently."

VALLEY FORGE CENTENNIAL ASSOCIATION.
BRIDGEPORT, April, 1878.

It is proposed by the Association to purchase Washington's Headquarters, as a memorial of the times which have given historic value to the spot, where were spent the darkest of those ever-memorable days. Next to Mount Vernon, perhaps, no other place is more endeared to the American people. The youth of the country are familiar with its history, through their daily studies; it is desired to give them a personal interest in it, by inviting the Public Schools throughout the State to give an entertainment, the proceeds of which shall be applied to this purpose. The names of schools and individuals contributing will be preserved at the Headquarters, in books provided for that purpose.

MRS. WM. H. HOLSTEIN, *Regent*,
Valley Forge Centennial Association.

GOVERNMENT AID TO POPULAR EDUCATION.

THE bill for the distribution of the proceeds of the sales of the public lands among the States for educational purposes, almost unanimously adopted by the House Committee on Education and Labor, provides that for the first five years these sales, amounting to $1,500,000, are to be divided on the basis of illiteracy. For the next five years, the interest on such sales is to be divided in the same way. After ten years, the principal and interest are to be distributed among all the States according to the number of children of school age. In the use of this fund, the States are to determine for themselves whether to use it for technical or common school education. The Secretary of the Interior is to certify to the Secretary of the Treasury the number of children on the basis of illiteracy, aud the Secretary of the Treasury shall thereupon transmit his draft to the Educational Board or authority of each State. These provisions, we doubt not, will meet the approval of all who believe with Horace Mann that "school-houses are the republican line of fortifications."

By various acts of Congress, says the *Louisville Courier-Journal*, 208,344,263 acres of the public domain have been given away to States and corporations for railroad purposes, and 4,405,986 for canals, making a grand total of 212,750,249 acres given in aid of such enterprises. For educational purposes in the States, Congress has given 95,817,714 acres of land, and $47,785,197.93 in money. To the Union and Central Pacific Railroad Companies alone, the Government has given $53,000,000 in bonds.

Both objects are important. The one embodies the development and settlement of the country; but the grants to education embody the important feature of minimizing illiteracy wherever men form communities, and keeping back all tendencies to savagery. The later operation is therefore of paramount importance.

The last report of the Commissioner of Education shows that the total school population of the United States and Territories is about 14,306,158, of which at least 5,500,000 children of the legal school age are not enrolled, and the Commissioner, making every allowance for possible errors, is of the opinion that certainly one-fifth of the youth of the country are continuously without instruction. He says: "How little benefit some may derive who are included among the enrolled will be seen, when it is remembered that in some cases those are reported who have been in the school a single day, and that, as a rule, none are stricken from the enrollment who have been in school a single week. Here is a subject for the reflection of those who believe that educators are over-zealous and are urging public education to a point beyond the demands of the country. Let them take this margin of two millions of untutored school population in country and city, and following its several members through life, observe how large a share of the idle, pauper, vicious and criminal classes are recruited from it. Here is ample room for illiterate adults, men and women, in all the pursuits of life; hence come the illiterate laborer, artisan, and the agriculturist of unproductive industry; hence come the illiterate voters to invite the tricks of demagogues and imperil our liberties; hence illiterate jurors and witnesses to corrupt the administration of justice; while too often, in our cities, they furnish the inhabitants of the hovels where fester diseases, physical and moral, that endanger all surrounding life."

This picture is not overdrawn in the least. In a country like ours, where universal suffrage obtains, a preponderance of illiterate voters will be fatal to the republic. The idea of democracy is supremacy of the people. If the people are ignorant they become a prey to political rings, the tools of corruptionists, and democracy becomes oligarchy; then comes a rapid decline of statesmanship.

No one will dare assert that popular education is the cure of all political ills, or that it eradicates crime. It, however, undeni-

ably makes the majority of the people intelligent, and if that education is properly conducted it will place virtue in the majority, in the place of corruption. Mr. Peabody was one of those far-seeing men who fully believed this, and acted on his convictions by giving $5,522,500 for the establishment of State educational systems in twelve Southern States.

The bill of the House Committee on Education and Labor proposes to fight off illiteracy from the American masses. It is a potent medicine designed to heal many of the diseases which afflict the body politic. The total area of the public domain in the States and Territories is 1,814,769,920 acres. The sales during the last fiscal year amounted to $1,452,969.23. By all the traditional and constitutional practice of the Government in behalf of education, the receipts from the sales of this yet extensive domain should be devoted to that cause.

HOW TO REFORM THE SCHOOLS.

THERE is a cry abroad in the land for a reform in the public schools. True, much of the howling about abuses is senseless and idiotic, but even this is better than the deadness of apathy. The following suggestions are offered for the benefit of "reformers" who are burning to distinguish themselves by a raid on the schools.

1. *Don't go to the Legislature with a bill.*

There are some things that even Legislatures cannot do: They cannot make people temperate, virtuous, or industrious. They cannot legislate about what people shall eat, drink, or wear; about what they shall say, or how they shall think. For these pseudo-reformers whose panacea is "law," a study of Herbert Spencer and John Stuart Mill is recommended as a specific remedy.

2. *Begin by reforming the school in your own district.*

The loudest grumblers about the failure of our public schools are those who never visit one, and who know nothing about them except from hearsay. See that your trustees employ a good teacher. Visit the schools and suggest to the teacher some of your "reforms," Look after the school library. Talk to the children. Get your neighbors to visit the school. Are you a granger? Suggest to the teacher a course of oral instruction on things relating to farming, horticulture, and botany. Start a school cabinet of minerals, woods, grains, pressed flowers, etc. Help the teacher to ornament the school-room with pictures. Question your own children about what they are doing in school.

Many country schools are almost worthless on account of the utter indifference of the "reformers." *No school can be made to rise very high above the average culture of the community which environs it.*

There is a country district in this State where a "Normal graduate" taught once on a time. A "trustee" visited him one day as he was giving an exercise in *vowel sounds.* The trustee didn't like the method. It was a new-fangled notion. It wasn't the way he had been "brought up." So he waxed wroth, took off his coat and dared the pedagogue to come outside and fight it out. He was a "reformer," willing to fight for the faith that was in him.

3. *See that your neighbors elect the best men in the district for trustees.*

If you take no interest in the annual school election, the Legislature cannot prevent the election of incompetent officers. If you are wild with "reform," run for the office yourself.

4. *Try to keep a good teacher when you get one.*

5. *Offer a fair salary and the chances are that you will get and keep a competent teacher.*

If you have to employ a teacher without experience, engage one that has had a full course of Normal School training. *Verb. sap. sat.* ("A word to the wise," etc).

6. *Don't expect to reform schools by abolishing text-books.*

They are necessary evils. Good text-books rank next in value to good teachers. The Chinese have had a uniform series of text-books unchanged for 3000 years.

Are their schools better than ours? If you believe that the school books in use are worthless, go to work and make something better.

If you are an old red sandstone fossil, and have never examined a school book during the last thirty years, you undoubtedly believe that there is nothing better than Webster's Speller; that in Murray's Grammar, the art of writing culminated; that Pike's Arithmetic is the best the world ever saw; and that Morse's Geography, A. D. 1807, is better than modern trash. The Chinaman does better: he believes in books republished B. C. 1500.

7. *Don't imagine that you, or the teachers, or the Legislature, or reformers, can overrule*

the laws of hereditary descent, and make all children good scholars, or industrious, temperate, frugal, law-abiding citizens.

You believe, perhaps, that it is the duty of the State to teach every boy a trade, and then find him employment. This comes down to you from a past age when men believed that kings were gods; or you believe in curtailing the studies in school to reading, writing, arithmetic, and geography.

You will find the hard common sense of the American people is stronger than your conservatism.

Neither you, nor President Eliot of Harvard, with his imitators, nor the enemies of free schools, nor the friends of religious schools, can stem the mighty current that has set in for *free higher education, and for technical and industrial education.*

The instincts of the masses are sound.

JOHN SWETT.

FREE TEXT-BOOKS.

STATE Superintendent S. R. Thompson, of Nebraska, well known to the school men of this State, recently wrote to one of the County Superintendents in his State on the question of free text-books, as follows:

To your inquiries regarding the use of free text-books in this State, I reply:

In the last report from the counties made to this department, sixty-one districts are reported as furnishing text-books free to all the pupils in the school. The result of this experiment, so far as I am informed, is highly satisfactory in nearly every case. I have heard of but one district, after trying the plan of free text-books, abandoning it. The particulars of this case I have failed to obtain.

The plan of furnishing text-books by the district is highly commended by the Superintendents of Maine, Wisconsin and Kansas, and seems growing into favor in many States. The plan is now in use in some four hundred districts in Kansas; some three hundred in Wisconsin, and a large number of districts in other States. New York City has tried it forty years; Newark, N. J., forty years; Patterson, N. J., ten years; Fall River, Mass., five years; Lewiston, Maine, six years; Bath, Maine, eight years. In all of these, and many more that might be mentioned, the plan seems to work well and to hold its own, as a practical measure.

By those who have had experience in this method of supplying text-books, it is claimed that it is:

1. Cheaper. The books can be bought in quantities at wholesale, thus saving from 25 to 40 per cent. on the first cost. The books being used by different pupils till worn out, are used longer before being thrown aside, and thus in the long run fewer books of a given kind are needed. The testimony of the school officers of several cities is given to show that the text-books furnished by the school boards last, on the average, four years. As regards the text-books for pupils, when they are furnished by the public, we have the following statistics:

Lewiston, Me., in 1874, cost per pupil	$1 10
Bath, Me., cost per pupil	1 00
Newark, N. J., average cost per pupil for ten years, per year	75
Batavia, Ill., cost per pupil	40
St. Louis	1 00

These statistics corroborate the universal testimony that free text-books last longer than those furnished by the pupil.

2. When books are furnished by the district, enough may always be on hand at the beginning of the term, and there need be no delay in the work because some pupils are without suitable books.

3. There will be perfect uniformity, and thus the best classification will be possible.

4. Books can be better adapted to the wants of pupils. Children frequently bring to school books not suitable for them to use, but rather than subject the parent to the expense and trouble of getting a new book, the pupil is allowed to go on using the unsuitable one. Again, pupils, in procuring books, frequently get not such a book as they want at the time, but one they expect to want before long, and thus the evil of unsuitable text-books is perpetuated. Free text-books would at once enable the teacher to cure this evil.

5. Pupils stay longer in school where books are furnished. Children, as every teacher knows, are frequently withdrawn from school because the parent is unable or unwilling to buy the requisite books. Many pupils are not sent at all, for the same reason. Experience shows that free text-books always increase the aggregate school attendance.

6. When changes of text-books are desirable, districts furnishing books can make a change without additional cost beyond what would be incurred in using the old one. When the old books are worn out, the new ones can be purchased to supply their place.

7. Families removing from one district to another will be put to no additional expense, when free text-books are furnished. In a new State where many persons are constantly coming in from other States, this is an item of considerable importance.

All these points of advantage, and some others, are claimed for free text books. As far as my personal observation and experience has gone, I am inclined to think that they are justly claimed.

I suggest, however, that the success of the plan will depend largely upon the skill and carefulness of those who carry it out. On this point I venture to make a few suggestions, based upon experience:

1. The books should be bought at wholesale, the entire first supply at once, so as to get the best possible reduction in price.

2. A few more should be bought and kept on hand than needed.

3. Each book should be covered with heavy, strong paper, and should have a label with the name of the district pasted on inside of the cover.

4. All the books should be counted and their condition observed at the beginning of the term, and the teacher required to keep a record of all loaned to pupils.

5. Books in use should often be examined by the teacher, to see if suitable care is exercised in using them.

6. Pupils who prefer to purchase books should be allowed to do so at cost to the district.

7. Where the school house cannot be securely

locked, a strong case for the books should be constructed with as many compartments as there are pupils. In this, books could be deposited at night and made safe from harm. Each pupil's books being in a separate compartment, no confusion would result from getting their books in the morning.

8. Districts desiring to purchase books should vote for it at the annual meeting, and make requisite arrangements to secure the necessary funds.

Yours truly, S. R. THOMPSON.

SOLDIERS' ORPHANS.

THE following is the report made by the Hon. A. J. Quigley, of Lock Haven, in the House of Representatives at Harrisburg, on the introduction of the bill providing for industrial education in the Soldiers' Orphan Schools:

Your committee having under consideration a resolution approved February 1st, 1878, to prepare and report a bill to provide for the further industrial training of children leaving the soldiers' orphan schools of the State after their arrival at sixteen years of age, has not been able to give to the subject that consideration that its importance demands; yet from a hasty and imperfect investigation of the matter in hand, it is convinced that an extended State supervision would, in many cases, be an advantage to the children and a blessing to society. In the judgment of your committee, it would be advisable to leave large discretionary powers in the hands of the Superintendent of Public Instruction, in organizing and establishing a system so purely experimental as the one proposed must be.

In order to bring the problem before the House for solution, and in compliance with your instructions, your committee has prepared and begs leave to submit to your consideration the accompanying bill.

Having complied with the requirements of the House, your committee asks permission to go beyond its instructions and lay before you a subject which has forced itself upon its attention during the investigation which it is called upon to make relative to teaching trades to soldiers' orphans.

The condition of the hundreds of children in our streets and poor houses is a just cause of alarm. The case of the neglected children of the street cannot well be exaggerated. Trained up in schools of vice and crime, forming habits of idleness and void of self-respect, imbibing false views of life, taught to despise the honest, frugal, industrious and prosperous citizen as an enemy, and to regard his possessions as their rightful object of plunder, they, in accordance to the well-known and fixed laws which govern the formation of character, are inevitably the dreaded foes of society.

And of the children who are fed, clothed and sheltered after a sort, in the almshouses of our Commonwealth, hardly better things can be said. Attempts to establish successful schools in connection with these institutions have thus far proved failures. It is the testimony of those who have made the experiment, that the loss of self-respect which is inseperably joined to the thought of being a pauper, blights the intellect and removes, to a great extent, the ordinary incentives to study, and to the evils of a deadened intellect are added the corrupting influence of vicious associations.

While it is true that some of the dependent poor are moral and virtuous, it is a well-known fact that the majority of adults who seek refuge in a poor-house, are anything but fit models after which to mould the character of youth.

It is universally admitted, on the part of those who have given the subject careful attention, that no place for bringing up children is so bad as an almshouse. A very large percentage of children reared in these resorts are known to turn out badly. Testimony establishing this fact might be multiplied, were it necessary, to almost any extent.

The system has, in fact, never been defended by any one acquainted with its workings. And there can be no good reason why a practice which is evil, and only evil in its results, should be longer continued. Could the people of our State only be made to realize what life in the poor-house is to the young and innocent, they would demand that henceforth not another child be brought within its baneful influence. To say nothing of what, on the score of humanity, is due to innocent but unfortunate children, the State owes it to herself, as a matter of economy and as an act of self-preservation, to so nurture and provide for this numerous class that it may not be a life-long burden and pest, but a useful and respected element in society. That this can be done, with rare exceptions, no one acquainted with the moulding influence of an early training can for a moment doubt.

Left as so many hundreds of children within the limits of our Commonwealth are, to receive no other training than such as the haunts of vice afford; or placed within a poor-house are as many hundreds more to take their first lessons from the dissolute and the vicious—from the drunkard, whose intemperance has brought upon him premature decay, and from the abandoned women, whom age and disease have driven from the street—it cannot be a matter of wonder that criminals multiply, that the number of the vicious and indolent is constantly increasing, that over the women and children of our towns and cities there hangs a perpetual dread lest their home shall be invaded by some professional beggar, insolently demanding food, and that the lives of farmers' wives and daughters, during the hours when husbands and older sons are working on the farm, are scarcely less secure than were those of our ancestors while as yet the red savage lurked within our borders.

Could the State provide for the culture and training of these two classes of children—those of the street and poor-house—much would be done toward averting the ever-increasing danger. A compulsory educational law applying only to the neglected, homeless and vagrant children of the street, and to those in almshouses within the State, would, in the opinion of your committee, be a measure eminently practicable and fraught with the most beneficial results. Home schools could be provided where these children could be clothed, fed and sheltered, and trained up amid the elevating and healthful influence of religion and morality, taught habits of industry and instructed in the ordinary branches of our public schools, until they arrive at sixteen years of age, or until homes in suitable families could be found for them.

And as the soldiers' orphans' schools have already nearly completed their noble works your committee would suggest, as a matter of economy, that some of the institutions could probably be secured, and would be suitable for the object proposed.

In the full conviction that the public will not long remain indifferent to the welfare of the hundreds of helpless ones, whose weal or woe depends wholly upon the nurture that the State shall provide, or unmindful of the source from whence the ever-augmenting tide of evil flows, which threatens the destruction of everything that makes civilization a blessing, your committee leaves the important subject in you hands, hoping that the day is not far distant when Pennsylvania shall assume the control and provide for the care and culture of all the neglected and dependent children who may be found within her ample bounds.

THE BILL.

An act making appropriations for the purpose of teaching trades, occupations and employments, or imparting skill in industrial pursuits to Soldiers' Orphans after they have arrived at the age of sixteen years.

SEC. 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by authority of the same.*—That the sum of twenty five thousand dollars is hereby appropriated for the purpose of teaching trades, occupations, and imparting skill in industrial arts, employments and pursuits to soldiers' orphans who have arrived at the age of sixteen years: said sum, or so much thereof as may be necessary, to be expended by the Superintendent of Public Instruction, in such manner as he may deem best, in order to carry out the object of this appropriation; and said Superintendent of Public Instruction shall report to the next Legislature the number of soldiers' orphans receiving the benefits of this act, the trades, occupations, and employments taught, and the progress made, and such other information as he may consider advisable and practicable, together with an itemized account of expenses; and the bills of all disbursements under this act shall be setted as hereinafter provided.

SEC. 2. It shall be lawful for the Superintendent of Public Instruction, by and with the advice and consent of the Board of Control of the State Agricultural College, in Centre county, Penna., as soon as the said soldiers' orphans arrive at the age of sixteen, to send the same to that institution for the purpose of continuing and completing their instruction in the trades, occupations, employments, and industrial pursuits, the said children thereto assenting, until they shall have arrived at the age of eighteen years, or shall have provided for them suitable homes in private families.

SEC. 3. In order to carry out the purposes of this act, it shall be the duty of the Board of Control of said College to provide out of the appropriation made by the State for this purpose, suitable rooms and apartments for females and their instructors, as also shops and faming utensils, and tools for different trades for the males.

SEC. 4. An account of all moneys expended under this act, shall be filed with the Superintendent of Public Instruction, an itemized bill, and upon his approval and endorsement of the same, a warrant drawn by him upon the Treasurer of the State for the amount so approved and endorsed, who is hereby authorized to pay the same to the said Superintendent of Public Instruction, for the purpose of settling all bills as aforesaid.

SEC. 4. A contract shall be made by the Superintendent of Public Instruction with the Board of Control, of said Agricultural College, for the instruction and maintenance of the aforesaid soldiers' orphans, on terms best calculated to promote the object of said institution, with the least expense to the State, and for the object to be attained by this act.

Directors' Column.

THE President of the Board of Education of the city of Dayton, Ohio, has in his late report some remarks appertaining to the value of the office of Superintendent to a system of public schools. We take pleasure in quoting what he says as applicable to the cities of our own State, both for the benefit of those that have and those that have not a superintendent:

The careful observer of our public schools during the twenty years since they were organized under the present system, will be struck with their growth, not only in numbers and facilities for work, but also in the efficiency of the system and the results obtained. This has been in conformance to the demands of a liberal public sentiment, acting through its representatives in the Board of Education. Of the means used there has been none more fruitful in results, or which has more justified the wisdom of its establishment, than the office of Superintendent of Instruction. It has given unity and completeness to the system, and secured harmony and efficiency in its workings. This is so well known as to need no argument to those familiar with the whole subject. The question, however, has been raised as to the utility of this office, and a public demand has recently been made for its abolishment.

It seems pardonable, therefore, that a brief statement of the case should be made for the benefit of those not familiar with the facts, and who might otherwise be led into giving at least tacit encouragement to a movement mistaken in its aims, and prejudicial to the interests of all having anything at stake in the prosperity of our public schools.

The work of the Superintendent is to see that all the requirements of the Board are fulfilled. He is to report to the Board the statistics of the schools, and furnish the members with such information as they may need in the discharge of their duties. He is to carefully observe the workings of the course of study and methods of instruction, suggest such changes as experience may indicate, and compare the results obtained in other cities with our own. He is to secure harmony and co-operation in the workings of the various departments of the school system, and adjust the differences arising between the teachers in their work and with the pupils and their parents. He is to maintain uniformity of instruction and discipline, and see that the pupils are making proper advancement in their studies. It is his duty to prepare the questions for the regular written examinations required by the manual, and make such other examinations as time and opportunity may present. Besides this, he is expected to acquaint himself thoroughly with the qualifications and efficiency of the teachers, and give

them general direction and assistance in their work. These are in general the duties of the Superintendent of Instruction. Upon the thorough and efficient performance of these duties depends in great measure the success of the schools.

Now it is evident that these duties cannot be performed in any adequate degree by the members of the Board. These gentlemen have other official duties which fully tax their time and patience. The work requires the entire time of a broad-minded, thoroughly-trained and experienced person, who is a professional educator, and who should be possessed of such talents as would command success in almost any sphere of life.

From these considerations, the force of which I think will be fully conceded, it seems clear that the office instead of being useless is an absolute necessity. It is equally a mistake to say that the office is expensive or extravagant. It is on the contrary a measure of great economy.

The only possible way of dispensing with a Superintendent without destroying the efficiency of the schools, would be to have such of his duties as could not be assumed by the members of the Board, performed by the principals of the various schools. The principals of the grammar schools now teach the seventh year classes in their respective schools. If they were made to perform the duties of the Superintendent, they would have to be relieved of the instruction of these classes, and their places could not be filled by other than teachers of the first grade. This would require the appointment of at least eight additional teachers at a salary of $550.00 each, or in all, $4,400.00. The salary of the Superintendent is now $3,000.00.

To spend $4,400.00 in trying to save $3,000.00 can not be called an economical experiment. It would be still more objectionable for other reasons. Instead of one S uperintendent we should then have twelve, performing in the aggregate no more than is now done by one, each working in his own way without harmony or co-operation. The instruction of the pupils would then be in danger of becoming a patchwork affair, like Joseph's coat of many colors. This plan was thoroughly tried in our schools for many years, and because of its failure to produce satisfactory results the office of Superintendent was established. I am not aware that there is in the country a city large enough to be a school district of the first class under the Ohio law, and which has a school system worthy of the name, which is able to dispense with this office.

Experience has also shown that the influence of the Superintendent is uniformly against extravagant and useless expenditure, resulting, when heeded by the Board, in a saving of more than the amount of his salary.

It may also be said that the work of the Superintendent is best done when the casual observer sees little to remind him of its performance, the effectual and harmonious working of the whole system being the best, and in fact only true, evidence of his competence for the position.

To abolish the office would tend to make service in the Board of Education so arduous and irksome as to render it difficult to induce competent and trustworthy persons to accept positions in that body. The public, even if willing to assume the risk, has no right to ask those who serve without compensation to assume duties properly belonging to salaried employees.

POOR PAY, POOR TEACHERS.

THE following is from a communication in the Bradford *Reporter:*

It is self-evident that no school can be successful without a good teacher; and the only way to obtain a good teacher is to offer a reasonable compensation for his services. We will see the reasonableness of this assertion when we consider that a person who is qualified for teaching school is also qualified for almost any kind of business; and the same qualities of mind and character which make him a successful teacher, will secure him success in almost any occupation in life. The successful teacher must be well advanced in the science of learning; he must be able to tell or convey to the minds of others, that which is contained in his own mind; he must have tact, patience and perseverance; he must be a moral character; he must be a person of decision and energy; and he must exercise a lively interest in the success of his efforts. Merit is, and always will be, rewarded; character of genuine stability, and principles of sterling worth are, and always will be, in good demand; and a person possessing such qualifications will never experience any serious difficulty in obtaining employment, and a liberal compensation for his labor. The idea that a reduction of salary would lessen the quantity and thereby better the quality of teachers (to use a figurative expression) is absurd in the extreme, while an opposite course would most effectually accomplish the latter, if it did not the former. We cannot help expressing our surprise at the course pursued by those in charge of our school matters; for in our candid opinion a more hurtful and ruinous plan to the cause of education than the one already adopted, could hardly have been thought of. Do we plead hard times? Do we compare the worth of human minds with the size or contents of our pocket-books? Heaven save us from the thought! We believe that if school boards would offer a salary of one hundred per cent. in advance of the present rates, the benefit received from the school would double the extra outlay.

When this is done, the position of schoolmaster will be one worth striving for. When the inducements are sufficient, there will be no lack of competent teachers. As the teachers' wages have been reduced, there has been an increased number of applicants for the schools; and this, instead of proving that the course pursued is a judicious one, simply proves the opposite. As the salaries have been reduced, teachers who could command large salaries have left the field, and the vacancies thus made have been supplied with second-class teachers. Consequently, those persons who will never be able to command good positions, whose talents will always be second or third class, come into better demand.

THE MAN FOR SUPERINTENDENT.

MESSRS. EDITORS:—Several Directors have spoken through *The Journal* on the Superintendency question. It seems to me that teachers too ought to be interested in this matter. In a few weeks a Superintendent is to be elected. Who shall he be? If the right man is in the office, keep him by all means. If a new man is to be chosen, it is high time he is being looked up. Directors should *seek* a suitable man. The *importunate candidate* is not always the right

man. I will give you what I consider some of the qualifications of a good Superintendent:

1. *Good Scholarship.*—The school law makes the holder of a professional certificate eligible, and says also that he shall be a "person of literary and scientific acquirements." How mnch literary and scientific acquirement is possessed by the average holder of a professional certificate? Probably this low grade was fixed when the law was passed, so that no county should be deprived of a Superintendent; but certainly it is not asking too much now to demand that he have much higher qualifications,—that he have mastered a Normal School or College course, or their equivalent; especially should he be well versed in *Mental Philosophy* and the *Science of Teaching*. The good Superintendent must be a leading educator, able to inspire his teachers to high attainments; but how can he do this unless he himself has high attainments?

2. *Successful Experience as a Teacher.*—The school law says he must have "skill and experience in the art of teaching." This experience should be in both graded and ungraded schools. Successful service as Borough Superintendent or Principal would be a good recommendation. None but an experienced man can give teachers the help they need. When a Superintendent visits a school he should enter it as a *helper* rather than a *critic*. It is generally an easy matter to see when things are wrong, but it is not so easy to set them right. This, however, the Superintendent should help the teacher to do; but without the wisdom drawn from experience, his views will be visionary and his advice, "drawing a bow at a venture." His instructions in his institutes, too, must lack point and force.

Let me here quote some pertinent remarks of the State Superintendent, in speaking of County Institutes, before the Convention of Superintendents in April, 1877, as reported in the June number of *The Journal*: "*The County Superintendent should be the leading instructor. He knows the weak points and in what direction instruction is needed.* * * * *Any Superintendent who cannot instruct his Institute with life and vigor should not occupy the position he holds. If he cannot lay down the principles of teaching, and illustrate them from the life of the schoolroom, he is not the man for the place.*"

3. *Irreproachable Moral Character.*—It is an insult to the army of noble men and women of the teacher's profession to place over them a man of tainted morals. In all that pertains to character, a Superintendent should be a Christian gentleman.

I regard these three points—scholarship, experience, and character—as *essentials*. There are several other qualifications which, though perhaps not so essential, are yet very desirable. Among these I may enumerate:

1. *Industry and Energy.*—It is not enough that a Superintendent be *able*. He must be *willing*.

2. *Professional Enthusiasm.*—A man will hardly succeed in any profession without enthusiasm, much less when his chief work is to do good indirectly through his influence upon others. He must have high ideals, he must give his teachers high ideals, and inspire them with zeal.

3. *Unity of Purpose.*—He ought to say with Paul, "This one thing I do." Hence no man is fit for the office whose mind is bent on the preparation for or the practice of some other profession.

4. *Tact and Originality.*—Many unforseen and unusual things will occur, and the highest genius will often be taxed to its utmost.

5. *A Friend of Progress.*—Progressive as a student, as an investigator, and as a worker. Some men advance to a certain point and then stop. When a tree ceases to grow it begins to decay. The water from a standing pool is never so good as from a running fountain.

In conclusion, I would urge Directors to read that part of the school law relating to the qualification of Superintendents. And may I not here take the liberty of asking the State Superintendent to express his views on this important question?

TEACHER.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, April, 1878.

THE County Superintendents in the several counties of the State are advised to give timely notice, as required by law, for the holding of a Convention of School Directors, on the first Tuesday in May next, to elect county superintendents to serve for three years from the first Monday in June, 1878. The proper forms for giving such notice will be found on page 187 of the Digest of School Laws and Decisions for 1876.

The following directions should be observed in giving the notice:

1. The notice is to be inserted three successive weeks, in not more than two newspapers of the proper county, if so many there be; but if none are published in the county, then by printed notices sent by mail, to the secretary of the board of directors of each school district in the county.

2. The newspapers in which the notices are published must be *weekly* newspapers. There is no law for publishing them in dailies. A county superintendent can have the notices published in as many newspapers as he may see proper, provided he does it at his own expense. This Department can pay for their publication in but two. The names of these should be sent to the Department immediately after their selection, and also their publishers should be requested to transmit to the State Superintendent *marked* copies containing the notice.

3. Newspapers selected to publish the notices under the law should transmit *receipted* bills for the same directly to the Department of Public Instruction at Harrisburg, and they will be promptly paid.

OATH OF OFFICE.

THE following is the proper form for the oath of office which must be taken by all County, City, and Borough Superintendents before they enter upon the discharge of their official duties. When taken, a copy must be forwarded to the Department of Public Instruction, and a copy filed in the office of the Prothonotary of the county in which the same is taken:

"I do solemnly swear (or affirm) that I will support, obey and defend the Constitution of the United States, and the Constitution of this Commonwealth, and that I will discharge the duties of my office with fidelity; that I have not paid or contributed, or promised to pay or contribute, either directly or indirectly, any money or other valuable thing, to procure my nomination or election, except for necessary and proper expenses expressly authorized by law; that I have not knowingly violated any election law of this Commonwealth, or procured it to be done by others in my behalf; that I will not knowingly receive, directly or indirectly, any money or other valuable thing for the performance or non-performance of any act or duty pertaining to my office, other than the compensation allowed by law."

[Signed] A——— B———

Sworn (or affirmed) and subscribed before me, ——— ———, Judge of the Court of Common Pleas of said county, (or Superintendent of Public Instruction, as the case may be,) the ——— day of ———, 18—.

ELECTION OF CITY AND BOROUGH SUPERINTENDENTS.

ALL cities and boroughs having a population of 7,000 or more are entitled to elect and have commissioned a city or borough superintendent of schools. No argument need be presented here to prove that such an officer, or some equivalent agency, is absolutely essential to the efficient working of a system of graded schools, giving employment to a number of teachers. A city or borough having a superintendent of its own, is exempt from the payment of any part of the amount required for the salaries of the county superintendents, and this will add to the school fund of such city or borough from 10 to 12 cents for every taxable.

Meetings of directors for the purpose of electing a city or borough superintendent are called in a different manner from those convened for the purpose of electing a county superintendent. In cities or boroughs where the superintendency has been in operation, the meeting is called on the first Tuesday in May, by the president of the board, of his own motion; and in cities and boroughs where the superintendency has not been in operation, a preliminary meeting is called by the president of the board, upon the request of a certain number of directors, at which the question of electing a superintendent is considered; and if decided in the affirmative, a subsequent meeting is appointed, as in other cases, on the first Tuesday in May, when the election takes place. Boards of directors in cities and boroughs that have a superintendent of their own, cannot take part in the election of a county superintendent.

HOW TO MAKE OBJECTIONS TO COMMISSIONING SUPERINTENDENTS.

COMMISSIONS to superintendents are not issued for thirty days after the day of election. This time is allowed in order that all who deem a superintendent elected by a convention of directors unqualified for the office, may have full opportunity to file their objections.

In this connection it is thought proper to call the attention of directors to the following provision in the law. Incompetent officers have been commissioned because directors were not fully advised as to the manner of presenting to the School Department objections to its being done.

"But if objections to issuing such commissions be made within thirty days, and such objections be signed, among others, by a majority of the members of not less than one-fifth of all the school boards in the county from which such objections are received, and certified to, under oath or affirmation, by at least three of the signers, the Superintendent of Common Schools may require such evidence, under oath or affirmation, in regard to the legality of the election, and the qualifications of the person elected county superintendent, as he shall deem necessary, and then shall issue the commission to the person properly qualified, who received the greatest number of votes; and the Superintendent of Common Schools, when engaged in the investigation of objections filed against the issuing of commissions to county superintendents, shall have power to issue subpœnas and to administer oaths; and any person refusing or neglecting to attend, and give evidence at such investigation, when legally subpœnaed, shall be liable to the same fines and penalties as if he had refused to appear and give evidence in the court of record, and the costs to be paid by the parties subpœnaing the witnesses."

It will thus be seen that a majority of one-fifth of the boards of directors in any county have the power to keep an incompetent man out of the office of superintendent, and it is hoped they will fearlessly exert their power whenever the circumstances demand it. Especially should this be the case whenever facts exist affecting the moral character of the person elected. The necessary papers can be drawn up and signed, if desirable, on the day of the election.

To this it should be added, however, that objections, to have weight in the hearing, must not arise from improper motives or considerations of any kind, but have strict reference, in the language of the law, "to the legality of the election and the qualifications of the person elected county superintendent," and those making charges must be prepared to present them in a regular way and prove them.

TO SCHOOL DIRECTORS.

ELECTION OF SUPERINTENDENTS.

IN substance, the following article was printed in the April number of *The School Journal* three years ago. Its advice and suggestions are as appropriate now as then:

Superintendents of schools are to be elected on Tuesday, the 7th of May next, in all the counties of the commonwealth, and in all cities and boroughs, having seven thousand inhabitants, that desire to do so. Scarcely any other election should so deeply enlist the interest of the people. We can afford bad government anywhere else better than in respect to our schools. Good schools make good citizens, and good citizens are necessary to the very existence of a state. Pennsylvania has 900,000 children in her common schools and more than $9,000,000 are annually expended for the purpose of instructing them. Whether these children shall be well instructed or otherwise, whether this vast sum of money shall be well or ill applied, will depend in good measure upon the officers placed over the schools at the coming election. Let whole communities see to it that the best men shall be chosen.

County conventions of directors will be called to

assemble at the respective county seats, by the county superintendents now in office. The best place for meeting is generally the Court House. City and borough conventions will be called by the proper board of directors or controllers in the manner prescribed by law in their usual place of meeting. The directors of cities and boroughs that elect superintendents of their own cannot take part in the county conventions. The law does not say at what hour the conventions shall assemble, and the local authorities calling the conventions must fix it to suit local circumstances. One o'clock, p. m., is generally adopted as the most suitable hour. It would be well for the directors of cities and boroughs entitled to elect a superintendent, but not now having one, to determine the question whether they will elect such an officer, at a preliminary meeting.

The convention should organize by electing a president and secretary. Vice presidents and assistant secretaries may be elected, if desired. County superintendents generally have in their possession full lists of the members of the different boards of directors in their respective counties; and when this is the case, a list with the districts properly designated should be handed to the president of the convention. It should be read, in order that all errors may be corrected, and that it may be known who are present. If the county superintendent cannot furnish a list of the directors, some one from each district represented should hand to the president the names of the directors in his district, from which the secretaries should prepare a roll, and this, when called, will show who are present. In voting, the name of each director must be distinctly called, and his vote recorded: that is, the vote must be taken by *yeas* and *nays*. It requires not only a majority of the directors *voting*, but of those *present*, to elect a superintendent.

Knowing who are members, the convention is prepared to fix the salary of the office of county superintendent for the coming term of three years. It will be found best in nearly every case to fix the salary before electing the officer. If several sums are named, the vote shall be first taken upon the highest, but if a majority of directors do not vote for that sum, then the vote should be taken upon the next highest, and so on, until some sum receive a majority vote. This done, candidates for superintendent can be nominated and voted for, until some one receive a majority. Nothing further is then to be done, except for the president and secretary to make out and sign the certificate of election in the form appended to this article, and forward it to this department. Blanks for this purpose will be placed in the hands of the several county superintendents and the secretaries of school boards in all the county-towns.

The following questions should receive careful consideration at the hands of the members of a convention about to elect a superintendent of schools: *What qualifications should a superintendent of schools possess?* and, *What salary should be paid him?*

In answer to the first question, it may be said that such a superintendent should possess certain *physical qualifications*. No one can properly discharge the duties of the office who is not in the enjoyment of general good health. Especially is this the case with county superintendents who have to visit schools in rural districts, and are consequently much exposed.

Intellectual Qualifications.—As a test of intellectual qualifications, the law renders any one ineligible to the office of superintendent who does not possess one of the following documents: A diploma from a college legally empowered to grant literary degrees; a diploma or state certificate issued by the authorities of a State Normal School; a professional or permanent certificate, issued at least one year prior to the election; a certificate of competency from the State Superintendent, or a commission as a county, city or borough superintendent. In addition to the intellectual qualifications usually indicated by the possession of documents like the above named, a superintendent of schools should be a broad, liberal thinker, a good speaker, a man of tact and marked administrative ability.

Moral Qualifications.—The law says no person shall be eligible to the office "unless he has a sound, moral character." The very letter of the law should in this respect be adhered to, and will be, so far as the Department is concerned. Nor is it sufficient for a superintendent of schools to be guiltless of any gross "immorality." He should be a positive worker for good; if possible, he should have all the moral qualities implied in the noble expression, "a Christian gentleman."

Professional Qualifications.—It is provided in the law, that a person cannot hold the office of superintendent of schools unless "he has had successful experience within three years of the time of his election." The *spirit* of this provision is, that a superintendent must be a professional teacher—not a lawyer, doctor, minister, or a member of some other profession, desiring to hold the office until a way opens to engage in something else.

The office of superintendent of schools belongs to the teachers, it has to do with teachers, and should always be filled by a teacher. If directors can find in a county a teacher devoted to his profession, who always attends institutes, who reads works on teaching, who advocates common schools, who, like Richter, "loves God and little children;" who, in short, is something of an enthusiast in his work—he, in all probability, is the man to make a superintendent, even though he has not been to college.

The second question is a difficult one to answer. The salaries of superintendents are now very unequal, and some change in the mode of fixing them has been thought desirable. With regard to cities and boroughs, the plan now pursued is a very proper one, as they pay their superintendents out of their own funds; but with regard to the counties it leads to great irregularities. It is considered within the power of the State Superintendent to change the mode of paying county superintendents' salaries, and to pay the superintendent of each county in whole or in part out of the appropriation to that county, and in case the irregularities which now exist become much greater, that power will be exercised.

Superintendents ought to be paid liberal salaries. Their work, when well done, is both delicate and difficult. Good officers can hardly be paid too much, and we had better have none at all than poor ones.

The judges of our courts receive $4,000 a year; other county officers in many counties receive even larger salaries; why should not well-qualified superintendents of schools be as liberally paid? In view of the whole subject, school directors are most earnestly advised *to elect as superintendents the very best men in their several counties whose services can be obtained, have it understood that they are to devote their whole time to the work of the office, and then pay them well for what they are required to do.* It is in this way and in this way only that the office can accomplish the greatest good.

"CHOPPED" MUSIC.—"I've heard your chopped music," said the old master. "It was a young woman, with as many white muslin flounces as the planet Saturn has rings, that made it. She gave the music-stool a whirl or two, and fluffed down on it like a whirl of soap-suds in a hand-basin. Then she pushed up her cuffs as if she was going to fight for the championship belt. Then she worked her wrists and hands, to limber 'em I supposed, and spread out her fingers till they looked as though they would pretty much cover the key-board, from the growling end to the little squeaky one. Then those two hands of hers made a jump at the keys as though they were a couple of tigers coming down on a flock of black and white sheep, and the piano gave a great howl as if its tail had been trod on. Dead stop—so still that you could hear your hair growing! Then another jump and another howl, as if the piano had two tails and you had trod on 'em both at once, and then a grand clatter and scramble and string of jumps, up and down, back and forward, one hand over the other, more like a stampede of rats and mice than anything I call music. I like to hear a woman sing, and I like to hear a fiddle sing; but these noises they hammer out of their wood and ivory anvils—don't talk to me! I know the difference between a bull-frog and a wood-thrush."—*Dr. Holmes.*

OUR FLAG IS THERE.

f

1. Our flag is there, our flag is there! We'll greet it with three loud huzzas, Our
2. That flag withstood the battle's roar, With foemen stout, with foemen brave; Strong

Fine.

flag is there, our flag is there! Be - hold the glo- rious stripes and stars!
hands have sought that flag to lower, And found a speed - y, wa - t'ry grave.

Full Chorus.

ff

Stout hearts have fought for that bright flag, Strong hands sustain'd it mast-head high, And,
That flag is known on ev' - ry shore: The standard of a gal-lant band, A-

D.C.

oh, to see how proud it waves, Brings tears of joy to ev' - ry eye.
like unstain'd in peace or war, It floats o'er free-dom's hap - py land.

CHILDREN have a certain instinct in the matter of musical memory which older people have not. It is something like the memory of the carrier-pigeon and the dog. A class of young children can be trained to remember the pitch of certain fixed tones, such as C, F sharp, B flat, A, and indeed all that we in music, so that you may say to them, "Sing G," A sharp, C, D flat, F, or any other tone, and they will sing it as promptly and correctly as they will answer questions on the multiplication table. This is of transcending interest and importance. Only children can learn to do this. And yet with such capabilities we have been content to let them grow up, and then we try to teach a handful to sing, organize a quartette here, train a solo there, and all the while let the children go losing those best years of their lives when nature makes them all singers, and gives them this wonderful memory of musical tones.

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THE SYSTEMS OF SCHOOLS IN PRUSSIA AND RUSSIA.

PEDAGOGICS ABROAD.—VIII.

THE latest report of the Minister of Education for the winter semester (half-year) of 1876, show that Prussia, with its 23,000,000 inhabitants, has 264 gymnasia or classical schools; 97 real-schulen, analogous to our English high schools, and 92 gewerbe-schulen and upper burger-schulen, which comprehend business colleges and art schools. Altogether, the educational establishments for the upper and middle classes in Prussia, under direct Government control and supervision, are frequented by 134,595 scholars, and taught by 6,359 teachers.

The gymnasia are attended by nearly 80,000 day scholars, (the German school-boy almost invariably lives at home), who pay from $12.50 to $20 a year, according to the form or school class to which they belong. The salaries of the masters, which have been lately increased, range from $450 to $1,250 per annum. In a few instances the stipend of the director or head master exceeds the latter sum, and a dwelling house is attached to his office. We may note that the funds of the gymnasia are derived in the vast majority of cases from the annual royal grants. The proportion of masters to pupils is much larger than in England or the States, and as a rule no master is expected to give more than three lessons in a day, while the director is rarely called upon for more than eight to ten a week. The large amount of leisure enjoyed by the instructor must not be overlooked in summing up the merits of the German system. We may mention further, that all the gymnasia possess a good library for the use of the masters, and most of them one for the scholars also. They have, moreover, philosophical apparatus, as well as botanical, geological, and mineralogical collections.

As to the pupils in these classical schools, they receive from twenty-eight to thirty lessons of an hour each day during the week, and spend from four to five hours daily in preparation at home, so that a boy who would stand well in his class is occupied about nine hours in a day. A certain amount of supervision is exercised by the masters over the boys, even during their leisure hours—the German boy does not play—and even in their homes. The scale of punishment rises from verbal reproof to written reproof in the class book, confinement in the class-room, of which notice is given to the parents, imprisonment in the school *career*, which is recorded in the half-yearly report, and expulsion, of which there are different degrees, and which can only be inflicted by the conference of masters. Moreover, if a pupil after being two years in the same class, fails to get his remove, he receives a quarter's notice and is advised to leave the school. It will be remarked that this system of discipline coincides in many points with that which obtains in the English Universities and at Harvard College. In all features of their social economy, the latter

institutions correspond much more nearly to a gymnasium than to a German university.

Of course, the work of education is not begun in the gymnasium. When the boys enter at the age of nine or ten, they must be able to read correctly both German and Roman characters, and write a tolerable hand, from dictation, without gross mistakes in spelling. They must also possess some knowledge of Christian doctrines, Biblical history, and the common rules of arithmetic. Such is the modest outfit requisite for admission to the school, in which the pupil will pass the next eight or nine years of his life.

In most of the Prussian gymnasia there are six forms, or rather eight, as the two higher classes are divided into upper and lower. In England the sixth form is the highest class, but in Germany the lowest category is called sixta, and the two highest secunda and prima, each having two sub-divisions. There is generally a still higher grade, called selecta, corresponding to the so-called advanced class at Exeter and other American Academies, and which is under the especial direction of the head master. We may say in general that in the forms or classes below quinta the course of instruction is adapted to the training of boys for almost every career of life, while in the two highest forms they are specially prepared for matriculation at the university. To give some notion of the scope of study at these German classical schools, we cite two subjects for monthly essays from the recent programme of prima—or upper class—work in a Berlin gymnasium. First, Are the fundamental principles of pictorial composition laid down by Lessing in his "Laocoon" observed in the Centaur Mosaics of Berlin? Second, Is the description contained in the "Horacles" and the "Achelons" of Philostratus based on a painting or a poem? We suspect that either of these queries would sadly stagger the aver age applicant for an admission to Harvard or Yale.

Although in Germany the philological students are among the very poorest, the nobility neglecting the classics after leaving school, while neither fellowships nor rich livings hold up a premium to success, still the basis of the higher education continues to be the study of classical antiquity. A short time ago the question of admitting the pupils of the real-schulen, or high schools, was submitted to the Professors of all the universities in Prussia; and yet not only men of letters, but a vast majority of their scientific colleagues, gave their voices in favor of classical training for all boys intended for the university.

Passing into the real-schulen, which are to Germans what our English high schools are to us, we find their original aim comparatively a humble one—that of preparing boys for mercantile and industrial pursuits more directly and rapidly than was possible to the gymnasium, with its classical programme. It was soon found, however, that these schools did not meet the wants of the wealthy merchants and manufacturers, whose sons are brought into close social relations with members of the professional and ruling classes. They considered it an injury to their sons to be altogether excluded from the liberal education enjoyed by gymnasiasts, and, as a concession to this feeling, the royal schools in 1859 were subdivided, and the study of Latin made compulsory in one section. The non-Latin category is identical with the so-called upper Burgerschulen, of which one variety, the trade or business college (gewerbe schule), merits a little attention.

The German trade school contemplates a six years' training, and undertakes to prepare a boy for the career of merchant, manufacturer, engineer or architect, or for admission to the several polytechnic academies in other cities. The notable feature in this plan of studies is the attention paid not only to mathematics, mechanics, and natural science, but to drawing and modeling from casts of the choicest remains of Grecian art. The insight thus gained into the ancient world is supplemented by some knowledge of Greek and Latin literature, acquired through translations. In this way it has been found possible to solve a difficult problem—that of training the less wealthy classes by the most thorough technical instructions for the practical work of the world, without wholly excluding them from the humanizing and most enlivening influences of literature and art.

EDUCATION IN RUSSIA.

"THERE IS ALWAYS MONEY FOR TROOPS, BUT NEVER FOR SCHOOLS."

A recent writer in the *Pall Mall Gazette* says: "Count Dimitri Tolstoi, who has been twelve years Minister of Public Instruction in Russia, is a man of large ideas, who would like to see every mujick proficient in the three R's. Prince Gortschakoff, who is of a different opinion, lets him talk but will not allow him to act, insomuch that whenever Count Tolstoi wants a grant, M. de Reutern, the Finance Minister, tells him with a doleful face that the State coffers are empty. There is always money for troops and Imperial fetes,

never for schools. Taking account of the increase of population and the greater facilities for spreading knowledge, Russia has retrograded rather than advanced in education since the time of Nicholas. The late Czar had no notion of popularizing knowledge, but he provided a good sort of official education for the higher classes among his subjects, and insisted that they should avail themselves of it. As to the commercial classes, he allowed them to take care of themselves, which they did by establishing private schools with German professors. Chancellor Gortschakoff saw the dangers of this system, and altered it. He encouraged rich noblemen to have their children educated at home and to send them to France or Germany for the finishing touch; but he has laid a sweeping interdict on all private schools for the middle class, because these used to afford a better education than was to be obtained in official academies. A highly cultivated aristocracy, an officially taught, or mistaught, middle class, and a totally illiterate populace —this would fulfill the Chancellor's ideal of a governable State. But he does not confess these views aloud, and balks education by the adroit device of seeming over-ready to aid it.

About a dozen years ago the city of Nijni-Novgorod wished to found a university, and applied for a charter, promising to raise the endowments by local subscriptions. The answer that came from St. Petersburg was most encouraging, and assured the applicants that the Czar had expressed a great interest in their scheme, and was graciously minded to help them with a grant. If they would wait a little, till the Imperial Council had discussed the matter, they would learn the amount of the grant and its conditions. They have been waiting ever since. It is of no use attempting to set up any educational establishment by private initiative. The project is always favorably entertained by the authorities, but it is invariably shelved. If the promoters grow importunate, they receive a dispatch full of high-flown language, pointing out to them how inexpedient it is to do things by halves. Their original scheme was either too small and needed enlarging for the public good; or too extravagant, and required cutting down. In any case the Czar has it under his august consideration, etc. Count Tolstoi is not responsible for these circumlocutory proceedings, but he has no power against the clerks in his department. He himself feels a scholar's enthusiasm for new plans, and has drawn up an admirable comprehensive project of national education, which has been "approved in principle" by the Emperor, and is only waiting the good pleasure of the Tschinn. Meanwhile the plan of approving great schemes in principle has the advantage of leading foreigners to think that the Russian Government is always going to begin a good many noble things next New Year's Day.

The Empire is divided for academical purposes into ten scholastic circuits: St. Petersburg, Moscow, Dorpat, Kiew, Warsaw, Kasan, Kharkov, Wilna, Odessa and the Caucasus. Each of these is presided over by a curator, who is chosen less for his learning than for his urbanity as a courtier. In theory he is omnipotent; in practice he does nothing without the advice of his Academical Council—a body of six members, two of whom are retired professors, three (generally) military officers, and one a police official. These people settle what books are to be used in the schools, grant professorial diplomas, and act as a court of appeal in questions of academical discipline.

All the educational funds whatsoever must pass through their hands; and a good share of them remains there. If a foreigner desires leave to teach in a Russian school, he must apply to this council, who, after tapping a few fees from him, cause him to be examined as to his knowledge of history. Now, Russian history sets forth that Napoleon I. was defeated entirely by the Czar's Generals (no mention is made of the winter of 1812 which froze the Grand Army), and that Waterloo was a Russian victory, Wellington being a servant of the European coalition of which Alexander I. was chief. If a foreigner be ignorant of all this, he is requested to learn it before he can get his diploma; as to natives, having been instructed in these legends from their youth, they can gabble them fluently, and do.

There are nine grades in the professorate. The first, which confers the title of College Councilor, ranks with Colonel, and belongs to the sixth degree in the Tschinn; the lowest, that of College Registrar, belongs to the fourteenth; below these are school ushers, or apparitors, who do not count as tschinoviks. Each grade of the professorate has allotted to it a curriculum of studies, and the lecturer must not trench on subjects which appertain to a higher grade. Not very long ago, a master at the Lycee Richelieu of Odessa, got into disgrace because in his lessons on Roman history he had expatiated upon the political results bequeathed to mod-

ern societies by the domination of Rome. He was told these results were no business of his. How could scholastic order be maintained if a lower-form master imbued the minds of his pupils with views at variance with those which would be taught them by superior masters in the upper forms? The Russian professor must be humble. If he be set to teach the first book of Euclid, he must be wary of showing that he knows anything about conic sections. Lest he should forget this, he is made to wear a uniform, and has only to glance at the breadth of the silver palm-leaf on the sleeve of his black tunic to remember what things he must teach and what avoid. Not till he can sport the gold lace of Councilorship may he speak out all he knows, and by that time he will probably have learned that the politics of ancient Rome are hot ground to tread upon.

Every city in the empire has its lyceum, and every town its grammar schools. In the lyceums French and German are taught; in the grammar schools German sometimes, but not always. English can only be learned at St. Petersburg, Moscow, and Odessa, except by private tuition. The charges for maintaining a boy as a boarder vary from £40 to £150, and at the aristocratic military school of St. Petersburg extras generally bring the sum up to £250. These rates are not higher than those at Eton, but the style of living cannot compare with that of English public schools. Russian boys sleep in dormitories; and it is only within the last fifteen years that they have been allowed bedding. Formerly they curled themselves up in rugs and lay down on wooden cots. Possibly this practice still prevails in some of the inland schools. Their fare is the eternal cabbage soup, with beef; and tea, with bread but no butter. They wear a uniform—a tunic in summer, and in winter a caftan, like an ulster coat, with the number of their class embroidered on the collar. Their heads are cropped close, and they walk upright as ramrods; for the most thorough part of their education consists in drill. They are usually quiet boys, very soft spoken, and not much addicted to romping, having no national game beyond that of leap-frog, which they play in a large empty room warmed like a hot-house. They spend their pocket money in cigarettes and in sweetened rum to put into their tea. These delicacies are forbidden, but can always be had of the school porter for a little overcharge. There is no corporal punishment nominally, since the present Czar abolished the birch by a special ukase; but discipline could scarcely be maintained among Russians without cuffing, so the professor cuffs his scholars, and they, in their turn, cuff one another with national heartiness.

When a member of the Tschinn dies without leaving sufficient to educate his children, they are often sent to a public school and afterwards to the university for nothing; but this grace depends much on the deceased father's good conduct.

Foundation scholarships are also conferred upon the sons of living tschinoviks as a reward for their father's zeal in the public service. The objects of these charities are required to enter the Crown service, and mostly furnish subalterns for the army, or else they go into the church. The professors push them on more than the other boys, for their attainments have to be specially reported to the district governors, and are particularly inquired into by the curator's delegates, who visit the schools once a year to hold examinations. If a foundation boy distinguish himself conspicuously, he sometimes receives a commission in one of the regiments of Guards, and along with it a yearly allowance from the Czar. Most of the Adjutants and Quartermasters in the Guards are former charity-boys, and it may be as well to state that they soon enrich themselves in these functions.

There are few village schools in Russia, and such as there are have sprung from the benevolence of good-natured land-owners, and are little approved by the authorities. However, if a land-owner chooses to start a school, the Government does not prevent him, and contents itself with providing a teacher thoroughly orthodox and ignorant. In the Mirs it is very rare to find a mujick who can read, and even the Mayor has to depend on the pope for the keeping of his accounts. A movement was started a year or two ago for instituting a staff of perambulating schoolmasters on the Swedish system, who should go about and disseminate at least the rudiments of knowledge among villages which were too poor to support permanent schools. Government, as usual, lent a ready ear to the scheme, but, having usurped the management of it, has done nothing hitherto but give promises. Now and then it will happen that a village pope, taking a fancy to a young mujick, instructs him, and the lad in his turn imparts his knowledge to his fellow-villagers. But if this gets known to the police, he may come to trouble for teaching without a diploma. Even the A B C in Russia must be taught in the official way.

THE WILD FLOWERS HAVE COME.

LIFE IN FIELDS AND WOODS.

THE wild flowers have come; yet how few of us go out to welcome them. One would think that after a sordid winter of waiting everybody would hasten to the woods, for refreshment in the sweet atmosphere of their beauty. It is the privilege of the walker to enjoy the closest intimacy with nature, for he goes to her secret places and sits down with her in the fondest intercourse —to come to the woods and gather flowers, and learn something of them, or, better than facts, take in the peaceful spirit of their lives. Let us go where the beauties of the spring are basking in bowers roofed with a fretwork of silver branches and crimson leaves, under an azure dome. Yet so lowly and simple are they that we may trample their matchless beauty under foot, and the charms of their abode are so harmonious and unobtrusive that we may pass them without a glance. Come, therefore, with a reverent head and an eye that seeks the greatest beauty in the simplest forms.

Nature is so suggestive that her first word to you begins an endless volume of facts and fancies. The difficulty is not to see enough, but little enough, for study. So you need not move from your seat at the foot of this oak to find more beauty than you can appreciate. The earth is still in her brown winter wrappings. Most of the trees are bare; they moan in the wind, as if still fearing December blasts; their bare limbs shiver, and two old fellows with their heads together grind and squeak with discontent. And yet how exquisite is the beauty of bare trees, showing all the fine modeling of their limbs, and the perfect logic of nature in suiting means to ends. Their smooth bark gleams in the sunshine over head, further down the hill, and on still further, through their fine network of brown and gray. In such a light they have a peculiar refinement; their forms are scarcely defined, yet they flash and sway as with a hidden life. The earth seems very sober in her brown colors, and well she may, when so many of her children are dead. The leaves are all stiff, and the grass lies in a lifeless mass on the ground; the thistle has bowed his hoary head, never to rise again; the golden rod, gray and shiveled, trembles in his last days. Indeed, the whole company of last summer's festival, so full of grace in every form and motion, has left the woods, and all that remain are here and there a tattered form, that mourns and totters in the scene.

There is also perpetual life in the woods. Here are ferns that have lived through the winter, and feathery mosses, now as fresh and green as they were last fall, but perhaps a little more ruddy with the season's exposure; and gray old mosses that never seem to die, but hold their own in any weather; and again dull bronze mosses that lie in wait patiently for whatever the seasons bring, and seem the richer in color after every change and every new look you take into their secret recesses. The partridge-berry vine, with its leaves like coupled hearts, looks out from the brown leaves with a cheerful air. The glossy laurel shines out of the dullness with some complacency, for although her form is angular and stiff, she is foremost in this time of need with her strong, dark green. Indeed, the evergreens of the woods are particularly interesting after the winter has released the earth and we begin to look for life; they seem to be perpetual blessings, unheeded in times of prosperity, but very dear in distress.

But beneath the dead brown there are brighter colors of new life. Here and there among the dry leaves a bunch of new grass or a cluster of new shoots from some early root makes a little oasis. Look still more closely and see little sprouts, brown and red heads, peeping up between the covers; many already stand up quite tall, with crisp, firm forms of steady growth. There are also little clusters of silvery leaves just issuing from a bed of brown moss; larger leaves, already bronzed in the weather, lying broad and flat around their centre; many just starting, with the down still on them, and others pushing out headlong, with erratic inclinations hither and thither before the upright course of later growth; and still others compact, each closely folded on itself, with some secret not to be seen or even guessed through its present reserve. Indeed, the ground seems alive with little beings peeping at you from their brown beds, and nodding in the wind with the quick, light ways of youth. Many of them are familiar faces; the prince's pine shows his royal veins very plainly; the sweet sicily, with its young leaves in sprays, waves in salutation; the common five-finger deserves recognition for his upright carriage and tidy form; the star of Bethlehem shows no flowers, but its beds of vigorous blades are the strongest green in the woods. Here is a young form of exceedingly graceful motion; it is even languid, swaying on its tall, slender stem. Its soft leaves, deeply divided, are a

dark red brown; their surface is a fine velvet, and their edges are as wavy as a ringlet. An old blackberry vine has a touch of human nature in him, for, besides presenting his thorns to everything, he shows a sullen purple hue to the young shoots that will soon replace his old leaves with new. Indeed, all these growths of spring have an exquisite beauty that has always inspired the poets. Even the weeds have now the peculiar attraction of youth, and a loveliness not recognized, at least when the strength of maturity removes them from our sympathy.

But where are the flowers? They are hidden in cozy places, and we must hunt for them. Each one has its own preference in climate and soil, and you must learn their habits and tastes, if you would know just where to find them. Each meeting you have with them increases your friendship, and every circumstance of time and place adds to your pleasure. How you went, where, and when, to find them the last time, make the groundwork of many delightful memories, too subtle —too sacred, perhaps—for any eye or ear. They become the text for sermons, and the ostensible theme for love hidden far deeper than the flower within the bud. By the magic of association they become a part of your inmost life, and the woods are then peopled for you with the fairest forms of fancy. The language of flowers is not then a printed page, but a living symbolism of the tender and the beautiful. Here is the anemone; it trembles as you look at it. There is the hepatica, with a modest and beautiful face and a breath sweetly scented, and yet so delicately that half her lovers know it not. She comes in her old dark-brown suit, with a crimson flush. The arbutus is just appearing beneath the leaves. It is the sweetest flower of the spring, though it blooms right on the mold, and scarcely lets the sun peep into its fair face. If you know their haunts, you can find violets, the cuckoo flower, white and pink geraniums, and many others that will delight your eye with their beauty, and your heart with their suggestive associations. * *

Too frequently do we meet with the inquiry, "What practical benefit can be derived from a knowledge of botany? We think the time required for such nonsense (actual expression used) could be more profitably occupied at other studies." How was it that the Creator spent all of the third day in developing and perfecting plant life, when He knew that an appreciation of His boundless art was to be considered as "nonsense" by these wise (?) children of Eve?

The practical benefit can be rendered apparent by a teacher sufficiently interested in the subject to give it proper interpretation. Many of those whose privilege it is to teach botany, too often regard it as an annual nuisance that cannot be banished, however flimsily taught, with a view to rid themselves of the task. This indifferent work raises and maintains the hostile host, whose cry is: "Away with this nonsense. Take the time that it occupies, to teach our children how to make money."

Well, to make money is to save it. Employ a teacher who is master of his profession, and not one who makes pretense at teaching; allow the children to make use of the instruction he imparts. When the nurseryman comes with his wonderful stock, permit them to explain that *Juglans regia* is the English Walnut, and no rare purchase. Who remembers the experience in Osage Orange? A year or so ago, a smooth-tongued individual disposed of a quantity of precious bulbs, that were to bloom in all the tints of the rainbow, and reveal odors that hinted of Arabia. Some recognized the article as Narcissus, while the duped buyers waited until the flowering and then vented their indignation—or swallowed it.

How many of those who have unlimited faith in the curative power of certain plants, are capable of selecting them, although they grow in abundance in every neighborhood? Shall we teach children that horehound, boneset, etc., have certain distinctive features and beauties which lead to their recognition? The valuable properties and flavor have already made impression, and will not the syrupy dose be accepted with better grace? Have any of our friends met the *Rhus Toxicodendron*, Poison Ivy, and, many a time after, fled from contact with *Ampelopsis Quinquefolia*, the Virginia creeper, or other innocent plants, because of the uncertainty of identity? How practical would a little information of botany have been at such a time!

A few weeks since, a little maiden came in with glowing cheeks and sparkling eyes. In her hands she carried some fine specimens of *Euonymus Americanus*. She delightedly recited to her mother that grandma thought the handsome strawberry bush was poisonous, but our little maiden told her that last spring the teacher had shown the pupils the bush and explained how beautiful it would appear in Autumn, and it was *all true*.

"Just to think," she said, "that grandma has all her life been afraid to touch the pretty plant, and it's the loveliest thing in the leafy bouquet."

Botany is one of the pleasurable portions of a teacher's work, for it stirs in the pupil an animation that can rarely be aroused by any other study. If the teacher is thoroughly conversant with his subject and interested in it, he need have no misgivings in regard to keeping the attention of the pupils. We are all well aware how appetizing is that which is palatable. Place before the children a poorly-prepared article and they will have none of it.

"A RADICAL DEFECT."

THE following article published in the *National Educator* deserves a passing notice. It is entitled: "A Radical Defect in Our School System."

The common school system of this State costs a very large sum of money. It is more expensive than any other enterprise. Over a million of dollars is spent annually upon our schools by direct appropriation. The taxes and other necessary expenses aggregate over ten millions annually. This does not include the money spent for text books, building purposes, etc. It may not be overstating the case when we say that the common schools of Pennsylvania cost us twenty millions a year, or at the rate of fifty dollars for educating each pupil. Let us be fairly understood. The average number of pupils in attendance is 650,000. The average school term is six months. So the average number of pupils in attendance is about 400,000 during ten months. Now, if the expense of educating these is twenty millions, it costs us fifty dollars a year to educate each pupil, including expense of keeping buildings in repair, text-books, etc. Is not this too much? In any seminary or even in a college the expense of educating a pupil is not over forty dollars a year, including text-books; certainly not over fifty. Would it not be cheaper to educate our children by other means? Could not the State even contrive a plan upon which education can be furnished cheaper and of a better quality than by the present system, if, as has been shown, private enterprise can furnish a superior or at least an equally good education at a lower figure! The subject is worth inquiring into in these times of depression and economizing.

Below we give some statistics on this subject. As these are compiled by sworn officers from the sworn statements, made by the presidents of the several school districts of the State, they are certainly as reliable as the vague statements of our critic.

Year.....	Length of School Term.....	Number of Teachers.....	Average salary of male teachers per month.....	Average salary of female teachers per month.....	Whole number of pupils in attendance.....	Percentage of attendance.....	Cost of Tuition...	School Houses...	Total cost, including expenses of all kinds.....
1867	5.78	16,523	$34 34	$27 51	789,389	63	$3,028,065	$1,262,798	$5,160,750
1868	5.86	16,771	35 28	28 76	800,515	63	3,273,269	1,991,152	6,200,539
1869	6.04	17,142	39 00	30 52	815,753	69	3,500,704	2,455,847	6,996,148
1870	6.06	17,612	40 66	32 39	828,891	68	3,745,415	2,765,644	7,791,761
1871	6.36	18,021	41 04	32 86	834,614	68	3,926,529	3,386,263	8,580,918
1872	6.4	18,368	41 71	34 60	834,313	64	4,104,273	2,864,113	8,345,072
1873	6.67	19,089	42 70	34 92	834,020	61	4,325,797	1;753,812	8,345,836
1874	6.73	19,327	42 95	35 87	850,774	67	4,527,308	2,160,514	8,847,939
1875	6.85	19,880	41 07	34 09	890,073	62	4,746,875	2,059,465	9,363,927
1876	6.85	20,192	39 76	33 60	902,345	78	4,856,888	1,735,148	9,163,928

In the foregoing statistics, copied from the Pennsylvania School Reports for the last nine years, the cents in the last three columns are omitted, as of no account in the final result.

According to the above figures, the school expenses *do not* aggregate over ten millions annually, and this *includes*, in all cases, the money used for building purposes, and in some cases, as in Philadelphia, it includes text-books, stationery, etc. Our critic says "it may not be over-stating the case, when we say that the common schools of Pennsylvania costs us twenty millions a year." Let us see how he makes up this account. He simply adds ten millions for books to his former assertion that the tuition costs us ten millions, and that, he exclaims, makes twenty millions! Why any B primary pupil could have told us that ten and ten make twenty! But now for the figures.

In the city of Philadelphia there were enrolled in 1875, 153,031 pupils, and the expense for books, stationery, fuel and contingencies, was $465,057, or exactly $3.04 for each pupil. This item, however, contains two others, namely, fuel and contingencies; and we know that if these last two items were deducted from the amount, it would probably not leave the average expense for books and stationery over two dollars for each pupil. At the same rate, the cost for books and stationery, if supplied in the same way as in Philadelphia, would, for 902,345 pupils in the state, be nearly $2,000,000. Where are

the *ten* millions now! Behold the *two*, but where are the *eight!* We know that, allowing on an average $2, for the books and stationery annually used by the pupils in public schools, the amount is greater than is requisite, according to the reports of cities where all these are furnished free. See the Report of the city of Salem, Mass., for 1875–6; also a report of the text-book committee of Milwaukee, Wis., published in *The Pennsylvania School Journal* last year. In both these reports it is stated that the entire cost on an average per pupil for these items, is from $1.10 to $1.25 annually. These cities all have nine and ten months school in a year, and it certainly does not cost any more for books in *six* months than in ten!

But our critic says that the average school term is only six months. Look at the statistics and see whether that is so. For the last five years, it has been fully six and three-fourths months.

But again: He says, the average number of pupils in attendance is 600,000, and for ten months 400,000. We cordially invite those interested to look at the figures. See whether his conclusions do not fall below the facts of the case. We here assert, without fear of contradiction by facts, that the annual average attendance and percentage of attendance on the basis of their entire enrollment of pupils in the normal schools, seminaries, and academies of Pennsylvania is not as high as that of the public schools of the State. Their absentees and their irregularities, by which the percentage in the public schools is diminished, is not reported in their annual statements. Very little do the managers of some of these institutions care for these irregularities, for the pay is in advance, and unless for sickness there is no deduction.

In the latter part of his criticism, he says that seminaries, etc., furnish education cheaper and better than the public schools Let us see. We examined quite a number of catalogues of different institutions of this character, and in all of them the salaries paid the teachers, and find that the cost of tuition is a great deal more than the average cost in the public schools. See statement of colleges in Pennsylvania School Report for 1876. Also Statement of Academies, etc., Pennsylvania School Report for 1875.

The author of the article under notice says that the interest on the money invested in the public school buildings is $3,000,000. Would he have us infer from this that there is no money invested in academy, seminary, and college buildings?

We submit the following to this critic of the public schools. Suppose this matter of education were committed by the State to private enterprise:

1. How would the poor educate their children?
2. If buildings cost so much, could private enterprise devise a way by which instruction can be imparted beneath the open sky?
3. Could it be done without books?
4. How far would some children have to go to school?
5. What sort of education would nine-tenths of the children get?
6. Would it require no skilled, supervising officer, to see that the money paid by the patrons of such schools is honestly returned in the form of good instruction?
7. Has not this system of seminaries, academies, parochial schools, and, if you please, schools where paupers were educated free, been tried all over this country, and has it not been found un-American and contrary to our institutions?
8. Which is preferable, to raise money by just and equable taxation, and therewith erect buildings for the instruction of the young, or by preachers and church agents passing from congregation to congregation, disturbing the devotions of the pious, in begging money to erect expensive colleges, seminaries, and academies?

STATISTICS.

FIRST STEPS IN READING.

THE first step in reading is the naming of printed words. A printed word is an object. To the beginner it is an unknown object. How does a child learn the name of any other unknown object? By study? No. By analysis? No. By guessing? No. How then? By being told it. That is the whole secret. Some one who knows the name of the object tells the child who does not know, and ever afterwards the name and the object are associated together in the child's mind, and each suggests the other. This last remark may require some limitation. It is strictly true, only, first, when the child *wants to know;* second, when the object or the name is presented frequently to the child's mind; third, when the objects are not too numerous for his powers of retention. It is thus that he has learned the names of the persons in the family, and their visitors; of the various domestic animals, and of the ordinary articles of household use. The child has a desire to know the names, because he sees the objects, is compelled to think of them, and needs to talk about them. The names first learned are the names of objects most frequently seen. When the name is once heard, it is recalled every time the object is seen, and the frequent repetition makes a permanent impression. And, finally, the child, acting under the promptings of nature, exercises a sort of "natural selection," and chooses first to learn those names that are most useful (which are usually the names of the objects which are most familiar), and then proceeds by degrees to those which are less and less common; and in this way only a very few names occupy the attention at any one time.

Now, if words are objects, and if the natural method of learning the names of objects in general has been correctly stated, it follows that the best method of learning the names of words has also been stated.

1. The child must have a desire to know the names of the words. How this desire is to be created or strengthened, must be left to the ingenuity of the teacher. In the good old times, before moral suasion was much talked of, the plan was very simple. It was merely a switch vigorously and perseveringly applied. It very seldom failed to create a very strong desire to know, for the knowing was the only way to escape the switching. Cruel, you say? Yes, but philosophical and effectual. And to spend time and labor on one who has no desire to learn, is both unphilosophical and ineffectual. If it is necessary, let us go back to the switch. But it cannot be necessary, except, perhaps, for the two extremes, the very young teacher who has learned nothing, and the very old teacher who has forgotten nothing. Every child has in him a spark of curiosity, inherited from Mother Eve, which a prudent teacher will surround with a small quantity of combustible material and fan into a steady flame, which will soon demand larger and still larger additions of fuel. The fire, thus early and properly lighted, need never go out. Life is all too short to satisfy the inborn craving for knowledge, when stupid teaching and stupid teachers have not extinguished it in childhood. But if a teacher cannot succeed in developing in a child a desire to read for the mere sake of reading, there are still other motives that he can appeal to—a wish to please his parents, a wish to gratify his teacher, or even a wish to be like other children only a little older than himself. Whatever method may be adopted to stimulate desire, the teacher must bear in mind that the desire to learn is as necessary to mental growth as the desire to eat is to bodily growth. Cramming, whether of body or mind, produces not strength, but dyspepsia.

2. The words to be learned must be presented to the child's mind frequently. He must *see* them; and he must see them *often*. A child who looks for the first, or even for the twentieth time at a printed page, does not see there what his teacher sees. The teacher sees paragraphs, sentences, clauses, words, letters; the child sees nothing but confused black marks. The straightness of the lines, the spaces between the words, the differences in the shapes of the letters, he does not see until he has learned to see them. The blind man whose eyes were suddenly opened by divine power, saw "men as trees walking." The eyes were perfect, but the man had not learned to use them. Children have also to learn how to use their eyes. Therefore, one word, and *one word only*, should be presented to him at once, in order that his untrained eye may be fixed on the proper subject. A book is the worst of all arrangements for beginners. A card may be used, with a cover to cut off all the printed matter except the one word which is to be learned. A machine has been invented, in which, by turning a handle, the words are brought one by one to a slit just large enough to allow one of them to be seen. But best and simplest is the blackboard, on which the teacher prints the word to be learned, while the child looks on. Children take great pleasure in anything that they see making, and if the discipline is not too strict, they will probably crowd around the teacher to watch the operation. But children, like grown people, do not always see what they look at. Do you doubt it, reader, so far as regards yourself? You have looked at a three-cent postage-stamp, hundreds, perhaps thousands of times. Are you sure that with all this looking you have really seen it? Try the experiment. Take out your pencil and reproduce, without a pattern, what you think you have seen. Now compare your picture with the original, and (not taking at all into consideration that which is purely artistic) you will find that there are things about a postage stamp which you have never seen, often as you have looked at one. The child will learn to see all the more quickly if he is required to reproduce what he is looking at. And the teacher will probably receive a good lesson, for she will learn (not without surprise, if she is a novice) what the untrained child really sees when he looks at a word for the first time.

It is not sufficient that the child shall see; he must see *often*. "Line upon line, precept upon precept." Precisely how often, no one can say; but no word should be considered known, unless the child can name it at sight without conscious effort, and without any appreciable interval between seeing and naming it.

3. The teacher must be careful not to present too many words at one time, or at successive times, to the child's notice.

The secret of success consists, not in teaching many words in a short time, but in teaching a few words so thoroughly and accurately that they serve as standards of comparison for any other words that may follow afterwards. If a child of six years of age can learn one word the first week, two new words the second week, three the third, and so on, he will at the end of forty weeks know eight hundred and twenty words, which is quite as many as he can make a good use of. If he should stay ten years at school, and learn only the same number of new words every year, he would, on leaving school, have the command of as many words as Shakspeare had. But the thorough knowledge of one word, implies an approximate knowledge of a great many words derived from it or connected with it, so that the apparently slow rate of progress which has been mentioned, will suffice to give a boy of seventeen a very extensive knowledge of the words in the English language. If the rate, slow as it appears, should turn out to be too fast, there is margin enough left for a considerable reduction. In the first year, when the ratio reaches five new words a day, he might, if necessary, stop the increase for the year at that point, which would give us seven hundred words in the year.

The points to be attended to by the teacher are these: A word once learned, must be presented and re-presented so frequently that it cannot be forgotten; and a certain small and definite number of words should be presented every day.—*Maryland School Journal.*

SPELLING.

IN a late number of a French educational periodical, an account is given of the modern methods of teaching orthography in French schools. The old countries have developed some useful educational expedients, and if we can gain from them any hint that will relieve our schools, in any measure, of the time and never-ending iteration of spelling lessons, it will be of more service than perhaps in any other item of the school schedule. The substance of the article will be given in this paper.

It appears that French teachers have mostly given up the idea and practice of attempting to teach the hand to spell correctly through the aid of the *ear* or the *voice*. It is the *eye*, they say, that is the hand's quick and efficient guide. The eye sees externally the written word upon the pupil's slate, and by introspection it sees also the mentul picture of its printed

form, and is as quick and sure to detect any difference as the hand is quick to obey its suggestions. For the hand has a wonderful memory of its own, as to succession of movements, and it is the hand alone,—not the voice, and, least of all, the ear,—that puts spelling to actual, practical use. Vocal spelling serves only to convey the order of the letters in a word to a person within hearing, but at some distance, as to a teacher in front of a class. As a help to readers, it is cumparatively of no advantage. A child that has learned that *sh* always means its one hushing sound, finds no aid from a repetition of its letters (*ess-aitch*) when stopped by a word like *shoe*. But by merely uttering the simple sound of *sh*, it is helped to the whole word. In German, the same pronunciation exactly is lettered *ess-tsay-haw-oo-haw* (schuh), which doesn't seem to suggest *sh-oo* well either. In French, the letters (digraphs) are now called *she-oo* (chou), but formerly *say-ash-oh-ooee* (chou) until the French Academy decided that *ch* should be treated as one letter and called *she*, and, similarly, *ou* be called *oo*. In England, a Royal Commission is about to be appointed to supervise such changes. Here it is from associations of teachers that a motion must issue for improvement of such sort. We might safely call *sh* (*ess-aitch*), "*she*;" and *double oh*, "*oo*;" and such Proteans as *a*, and *u*, and ch might each have two names, as *ah* which the Scotch use, and *ay* which we use. And by such ameliorations we can gradually smooth many a roughness in the way to literature. We do improve some. For example, *z* was calted "*izzard*" a hundred years ago; and to spell gizzard was then a fearful thing. Later, *z* became *zed*, and then *zee*. Now, the common-sense teacher gives his pupil a hint to merely buzz out the sound of *z* when he finds it heading a strange word in the reading lesson, and so gains much more.

Every teacher who has set infant pupils to making print-like copies on their slates of the *so go lo*, *be we me*, etc., of their first lessons, finds with much satisfaction what fair imitations of the complicate types the little ones are soon able to make, and how the very useful occupation pleases them. And this sort of first pencil-work is much better practice for the hand than the slanting style of current hand-writing, which spoils the hand for drawing, although so convenient in script. Print-writing is of the greatest advantage, too, in making the learners familiar with the words, and with every turn of the letters that compose them. While the hand and the eye are exercised in tracing these, the figure of the word becomes impressed upon the memory, and may easily be fixed there at once, a possession for life, not to be easily dislodged or even confused, after the impression has once been sunken deep enough.

The French method of securing and confirming these impressions, and of training the hand to readiness in reproducing them, is based upon the aptness of children for imitating simple forms of outline, and on the readiness of their minds to receive and recall an image of what they have seen. A mere jingle in the ears of letters' names, like the *ess-aitch-oh-ee shoe* of vocal spelling makes a far slower and more evanescent impression, and must be repeated many times before it can be recalled with any certainty. Even then the ear is comparatively a very inconvenient and unreliable guide to the hand for the writing of a word, and incomparably less ready at determining, after it has been written, whether it is correct or not. But the eye sees all at a glance, and guides the hand intuitively and silently, and without any need of calling upon the voice for the aid which it often cannot give.

The French course, having set a new word distinctly and separately under the child's eye, seeks to keep it there, and to have it viewed critically. It is commented upon, talked about, copied, the copy criticised sometimes by fellow learners; its sounds are separated, its silent letters determined; it is described with closed eyes; it is reproduced presently upon the slate while the book is closed, or the blackboard veiled, and thus it becomes safely stored in the mind, ready and quick to appear to the mental vision whenever required.

But there are thousands of words to be learned, and the teacher has other branches and other classes demanding attention, and requiring for due study a quiet order that vocal spelling classes violate and disturb, while they also absorb the teacher's time. Even in the better practice of dictation to a class of writers, the teacher is still held aloof from other duties and classes, and the voice is necessarily strained to convey to dull or unapprehending ears the exact word meant. There will be misconceptions in spite of loudness and repetition, as when a dict*or* calls out "write foregoes" and a little dict*ee* writes "go go go."

These dictation exercises are not favored much by teachers, in spite of their usefulness in teaching the hand to spell. They consume too much time, which the teacher feels to be worse than wasted, for he is detained from other duties; he hurries the laggards, but this only precipitates them into blunders. Blunders make harmful impressions. On the whole it does not work well. In France it is charged against provincial teachers that they teach many erroneous pronunciations through the dictation lessons. All these and other objections and difficulties are quite obviated by the simple French resource which enables the pupils to write their spelling exercises from dictation without a word being uttered, or any dictor required. The teacher is left free and unembarrassed to do better work; the school is undisturbed. A glance at the completed exercise will show whether it is correctly worked out, and a cheery word now and then to stimulate waning industry or attention is the most that is requisite from the teacher, on the part of the orthographists. They are benefited even more. They have a dictation steadily before their eyes more perfect than the transient teacher's voice could be to their ears. They have uninterrupted quiet and full time to consider, recall, refer; and to write carefully and alter what seems imperfect. They are not mere mechanical copyists, they gain immensely by the constant habit of holding the abstract image in the mind's eye until they have reproduced it on their slates. As they advance to arithmetic, rhetoric, etc., this culture will prove invaluable. Withal the exercise is animating and pleasant; the mental operation is like the solving of a slight puzzle, and the hand movement refreshes the attention and cultivates dexterity. The words become so well impressed that the scholar feels that he is really getting on, and is encouraged the more by feeling that he is advancing through his own labor and endeavor.

All this follows the use of a single simple device which originated with the Abbé Duployé, who is one of the clearest writers on education in the field. He devised a stenography of remarkable simplicity. It uses only simple strokes such as a child can learn and distinguish even more easily than the complicate type forms, while they are equally distinct and legible, and express every sound in its proper succession. The strokes are all light, or if made heavy they are not altered in meaning. This improvement has given a

great impulse to the previously adopted use of stenography for dictation in primary public schools under authorization by the minister of Public Instruction. For this use it is altogether superior to the English or German stenographies.

The youngest pupils learn to write the sounds of words with these signs, which being quite different from the common type-forms used for the letters do not confuse with them in the mind. As they advance they learn to reproduce the type form of the word from the sound-form which adds variety to the study of each word and confirms the impression of it in the memory, while the practice itself is a superior training for the hand, being equivalent to the usual first lessons in drawing. This is continued as long as the much shortened orthographical course is incompleted. Practice on the ordinary oblique hand-writing is deferred until the child is 8 or 9, and is able to imitate closely any simple outline in any direction. And the present writer can say for the effect of early and previous training in drawing lessons, print-writing, etc., that he has had very many opportunities of observing it during more than thirty years, and invariably those trained with early phonographic exercises have made the best writers—their lines being clear, even, devoid of scratches or bewildering flourishes, pleasant to read. And most of these writers are expert at sketching or drawing. Fifty years ago it was a heinous fault in a child to "make pictures" in school.

Some account of the derivation, use, etc., of the short-hand symbols suited for an application of the above course to English will be given in another paper. Meantime any teachers of Pennsylvania or elsewhere who may desire a copy of the adapted alphabet will be cheerfully supplied free on application with stamped and addressed envelope, to

Tyrone, Pa. W. G. WARING, SR.

WRITTEN EXAMINATIONS.

AS A TEST OF THE QUALIFICATIONS OF TEACHERS.

WHEN a school committee advertises for teachers, and entire strangers present themselves as candidates for election, in the absence of more reliable sources of information a written examination is frequently resorted to, in order to ascertain something concerning the technical knowledge of the respective applicants. But, so well aware are all educational men of the unsatisfactory nature of this test,—too often a cruel pretense in order to cover a choice already made,—that superintendents, supervisors, and headmasters of schools, are continually going about from town to town, making inquiries and visiting schools, for the purpose of finding the best teachers, and securing them by paying a higher salary.

If experienced educators find it necessary to take such pains in order to make a judicious selection, with what reason can a school committee impose a written examination upon teachers who have been employed for years in the same town with themselves, under their own supervision, or that of their predecessors in office? Do they consider that the answers to any ten or twenty technical questions upon each of the branches taught in the schools, can be a fair test of a teacher's ability? Do these show his moral character, faithfulness, conscientiousness, tact, judgment, and common sense? What do such answers show of the ability of a master to supervise the work and direct the efforts of subordinate teachers, bearing himself at all times with proper dignity, kindness, and courtesy? What do they show of his ability to secure order and propriety of conduct in and around his school-building, both in hours of session and in time of intermission, and to perform the numberless important duties which must devolve on a master, and on him alone?

Or, again, of what value are such questions and answers as a test of a primary teacher's fitness to take charge of little children five years of age, leaving for the first time their home and a mother's care, taking their first step out into the great world of danger, trial, and temptation? Is it of no consequence that these tender, almost helpless little creatures, should be committed to the care of a person of highest principle, fidelity, continued watchfulness, and motherly kindness,—one who will, while she teaches well, carefully attend to all their wants, warming or drying them, if cold or wet, on their arrival at school, and seeing that each little one is properly wrapped and protected before leaving for home?

We may remark, in passing, that whether we regard care, discipline, or instruction, there is no grade of school more important than the primary; and yet, unfortunately, none is so little understood by the superficial or unskillful observer. Pupils here too often receive their first ideas of school work from one who has in her own mind neither system nor method. Their reading, the most important of all their exercises, is a dolorous drawl, and their other little recitations are a monotonous sing-song, entailing for years unnecessary labor on the part of subsequent teachers.

Or, in general, what do the answers to such questions show of any teacher's experience, or the benefit derived therefrom, of his power to elucidate principles so that they may be clearly understood by the pupils, and of his knowledge of the human mind, and the best methods for its development? What do they show of the judgment necessary to determine how much instruction shall be given

n class, and how much to respective pupils? now much should be imparted to the pupil, and how much withheld? how rewards and punishments shall be meted out, and with proper adaptation to the peculiar characteristics of each individual pupil, and yet with strict impartiality, so that all can feel that the teacher is just? What do such tests show of a teacher's tact for avoiding unnecessary collision with pupils and parents, and of his ability to give instruction in morals and manners in a way which shall be both acceptable and effectual? in short, to take charge of an immortal mind, and in the best manner, during the time allotted, fit it for all its future, both in time and eternity?

The above is but a very faint sketch of the duties devolving upon the teacher. How far a written examination can be a test of his efficiency in the discharge of these duties, the intelligent reader will determine. Why, then, should school committees require old and successful teachers to submit to a written examination or lose their places? Are there no other and better means of ascertaining their ability and worth? Would not a knowledge of their work in the school-room, of their personal character and the influence which they exert, of the estimation in which they are held by the parents, the love and esteem of their pupils, and the preparation of those who have been promoted by them, be a far more reasonable test? Nay, are not our school committees elected that they may visit the schools personally, and from careful observation learn the manner in which the teachers do their work, and the consequent results? They should know that a teacher may appear deficient on a technical examination, and yet be in his or her particular grade very efficient and successful, securing far more valuable results than another who is thoroughly "posted" on all the questions which would be justly expected to be answered by a recent grammar or high-school graduate. Do they not know that a person may have acquired a thorough education, and yet, from continued employment in that which fails to bring the technicalities of that education into practice, have become comparatively ignorant of them, while the broader culture secured by reading and experience is a far better preparation for the teacher's work? Let the same test be applied to the other professions. Who would prefer the technical accuracy of the recent theological, legal, or medical graduate, to those qualifications which time and experience alone can give?

I know of but one purpose which such examinations can well subserve, and for this perhaps nothing could be better calculated. It must frequently be the misfortune of our public schools to be entrusted to the supervision of men who are, to a great extent, ignorant of the duties of their office. For this they are not to blame; it is incident to the present system. For although in the other professions and employments none but those specially fitted therein are chosen as supervisors, yet men of every profession and employment are elected to have entire superintendence of teachers, with a power perhaps the most absolute in the Commonwealth. Now, as wise men, they accept the position with becoming modesty, obtaining information from every reliable source, confer with the teachers, treating them as intelligent and honorable beings, and make changes gradually, both in persons and policy, and that only after most mature deliberation; thus commending themselves by faithfulness, discretion, and impartiality, to the community whose servants they are. But, if goaded by a sense of their own inefficiency and of the public distrust, or puffed up by an idea of their own special fitness for the position—while ignorant of the grand fundamental principles of popular education, and the most important characteristics of those engaged therein—and if ambitious both to display great critical learning, and to be the heroes of a mighty revolution, perhaps nothing better could be devised than a written examination, imposed from time to time upon experienced and successful teachers.—*Cor. N. E. Journal of Education.*

EDUCATION.

EDUCATION is a fair subject for criticism from all sides. Almost any one feels competent to discuss the system and methods of instruction, whether in public or private schools. Indeed, our merchants who are engrossed in prices current, presume to criticise the value of modern education from their standpoint, even as to how far it qualifies a man to deal in options or to sell cheese. Our collegiate education is also subjected to the gauge of the market, and if our schools do not turn out men competent to make a percentage on hogs, or to sell profitably on a margin, they are rated down as impracticable. Well, we suppose education must stand this kind of criticism until hard times have taught the public that the supreme end of man is not to get rich.

In point of fact, the greatest benefactors of

our race have not been men who enjoyed the profit of their study or invention. Kepler, who did as much for physical science, on which some of our best and most useful inventions are founded, could not have got his bread in his proper astronomical studies. He lived by calculating the nativity of stupid Austrian princes and making almanacs, while the world remembers him for work on which his own generation would have begrudged him a groschen. To come to later times: The adored Huxley is on record as having said that a man who knew all about a piece of chalk was better educated than one who knew all about a century of human history, and yet that he could not recommend a student to pursue his line of study, because a living was not to be earned in it. Look at inventors: Professor Morse would have thought himself amply repaid with a quarter of the money Mr. Orton has made in speculating in his invention. Elias Howe received a royalty from every sewing machine made in the land for years, and yet Wheeler and Singer made five or six times as much as he. The list of examples might be extended indefinitely. Are we, therefore, to conclude that the supreme end of education is to make Singers and Wheelers and Ortons, while the Howes and Morses and and Keplers are neglected, as impracticable, worthless men? This would be a selling out of intellect to Mammon.

In some way the modern public needs to be recalled to a sense of the worth of discipline and mental activity to the human race, whether it is paid for or not. The greatest human benefactors and the most practical investigators are seldom recompensed in this world. Is the standard of mental activity and discipline to be sought in a cash account? Are the Judges of the Supreme Court fools, because Charles O'Connor, David Dudley Field, and hundreds of other lawyers, earn from five to ten times their salary? Are Liebig and Bunsen to be put down as failures, because they could not earn as much money as A. T. Stewart and Cornelius Vanderbilt? Is Socrates contemptible, who died poor, because he did not get as large a property as Seneca?

There is much said on the subject of practical education, and of training youth for efficiency in the pursuits on which their incomes may depend. But if we can make a correct analysis of these arguments, they have but one criterion, which is the ability to traffic and skin other people and make money. The whole moral capacity of mankind is tried, not simply by even its productive power, but by its selfish ability to get ahead of its neighbors. Thank heaven, there never yet was a scheme of education invented that could work this sordid and infamous result. Thank heaven, all true instruction is away from subtle and crafty tricks, into philanthropy, beneficence and truth. If the supreme end of man is to make money, we confess that all possible schemes of education are against it. We educate men, not for their personal advantage, but to make them more useful to society. Only on this pretext can the public schools be sustained at all. If these are to be degraded into mere instruments for making sordid, scheming, selfish rogues, then let them be altogether abolished, for they will not work this result. Children are educated to make good citizens of them, and not to make social pirates of them.—*Phila. Press.*

"A WOMAN AT THE BOTTOM OF IT."

"To tell the truth," said John Haviland, as he threw aside his paper and faced the little group in the parlor, "I am fast growing out of patience with this text—'A woman at the bottom of it.' It would be strange in this world, made up, as far as we are aware, of nothing but the two sexes, if a woman would not occasionally be found at the bottom of anything good. It is the injustice of the thing that makes me angry. Now there are hundreds of us poor fellows who owe all we are, all we have, and all we can hope to become, in this world or the next to the unselfish love of woman."

The gentleman's face was flushed, and he spoke very warmly and feelingly; so much so that his wife, rocking her baby to sleep in the farther corner of the room inquired:

"But why should you care, John? It has always been so, and always will be so. We don't think much about it now, because we have been taught to expect it."

"But you should care! And you should fight for each other more than you do. There is one chapter in my life's history that I have always kept locked in my heart; but to-night I feel as if it were my duty to open it for your inspection; and I do it for the love of woman—for the love of one woman who made me what I am, worthy to be the husband of a good woman."

"Why, John!" said Mrs. Haviland, softly approaching with baby still held tightly to her bosom, "you absolutely frighten me."

"Let's have the story," said the rest of the group, certain that something good might be expected; and John commenced, at first a little timid, but gaining confidence as he proceeded:

"When I first came to New York, at the age of twelve years, to seek my fortune, I can call myself a precocious chap, without danger of being accused of an unusual degree of self-appreciation. I was quick to learn everything, the bad as well as the good. My employer used profane language. I picked up the oath he dropped with a naturalness that surprised even myself. The boys in the office all chewed tobacco. This was a little the hardest job I ever attempted, but

after two weeks of nausea and indescribable stomach wrenching, I came off victorious, and could get away with my paper a day with the best of them. True, every word of it," continued the speaker. "One afternoon I was sent with a note from my employer to a house in the upper part of the city. I hadn't anything to read, but I had plenty of tobacco, and with that I proposed to entertain myself during the two or three hours I must spend in the passage. For some distance I did not notice who were beside me, but by and by, a lady said, very softly and pleasantly;

"'Would you please, little boy, be more careful, for I am going to a party, and I should hate to have my dress spoiled.'

"I looked into her face. It was the sweetest face I ever saw. Pale, earnest, and loving, to my boyish heart it was the countenance of an angel."

"What in the world did you say?" interrupted Mrs. Haviland, her bright eyes filling with tears, as she saw how the memory of this beautiful woman affected her husband.

"Say! There was very little I could say. I think all I did was to look. I managed to dispose of the tobacco, however, and wiped my mouth very carefully, all of which I felt certain she saw and mentally commented upon."

"'Have you a mother, little boy?' she next asked, in the same tone.

"'No, ma'am,' I answered, and felt my throat filling up, and I knew I must swallow mighty fast to keep from sobbing.

"'You have a father, then, I suppose?' she kept on.

"'No, ma'am, no father.'

"'Brothers and sisters?'

"'Neither, ma'am.'

"'Then the little boy is all alone in the world?'

"'All alone, ma'am.'

"'How long has your mother been dead?' and the dear woman looked away from my face and waited till I could speak.

"'Two years,' I answered.

"She was silent for a moment, and then said, so sweetly—oh! I never shall forget it; 'And what do you think your dear mother would say—how do you think she would feel—to know that her little boy was guilty of such a disgusting habit as this?' pointing to my cheek, where the tell-tale cud had vainly tried to stand its ground.

"'I must leave now,' she continued, 'but here is my card; if you come to see me almost any evening I shall be glad to see you, and perhaps we can be of service to each other.'

"She gave me her little gloved hand, and to my dying day I shall never forget the sensation of that moment. I could not bear to part with her; without her I could do nothing—with her I could grow to man's estate—a man in the truest sense of the word. From that moment tobacco never passed my lips.

"As soon as I could summon courage, I called upon that lady. Well do I remember how my heart beat as I waited in the elegant parlor for her to come down; and how awkward I felt as I followed my guide to her private sitting-room. Here she got at every point of my life, and, before I bade her good-bye, it was arranged that I should spend two evenings a week at her house, and study on these occasions just what she thought best.

"No lover ever looked forward to meeting with the mistress of his heart any more than I did to these meetings with my friend.

"I grew careful of my personal appearance, careful of my conversation, and strove in every way to be worthy of this noble friendship. Two years passed in this delightful manner—two years that made me. My friend not only attended to my studies, striving also all the while to sow the right kind of spiritual seed, but she procured me a business situation with a particular friend of hers, where I remain to this day. Nobody but God knows what I owe that woman. During the last three months of those years, I noticed that she grew constantly pale and thin; she never was betrayed into speaking of herself. Sometimes, when I would ask her if she felt worse than usual, she would reply:

"'Oh, no! I'm only a little tired—that is all.'

"One evening she kept me by her sofa much longer than was her custom, while she arranged lessons, and laid out work enough, it seemed to me, for months.

"Why so much to-night?" I inquired, conscious that my heart ached, and vaguely suspecting the cause.

"'Because, dear,' she answered, 'I do not want you to come next week, and I am anxious that you should have sufficient work to anticipate, as well as to keep you busy. I think I can trust you to be a good boy, John?'

"'I think you can, ma'am,' I answered, almost sobbing.

"'If I should see your mother, my dear boy, before long, what shall I say to her for you?'

"Then I knew all, and my grief knew no bounds. It is no use to go on. She died two days after; and when I hear folks saying, 'There's a woman at the bottom of it,' I feel like telling the whole world what a woman did for me."

MANNERS, THE MINOR MORALS.

ANNA W. KIRKWOOD.

THIS subject, in the press of the many things that crowd the busy school hours, is one which we sometimes neglect, or leave to the chance attention of parents and friends, forgetting that the teacher's word comes with authority, and that subjects to which we fail to call attention, may seem of little consequence to children who under home rule are left to consult their own inclinations.

Americans, as a whole, have not the reputation of a highly cultivated people. If we as teachers should endeavor each in "our small corner" to cultivate more fully attractive and becoming manners in those who come under our influence, a generation or two might show a better record in this respect.

That the lack of attention to this subject is a prevailing one we judge from the proverbial straws that show the direction of the wind. Perhaps it may be well to consider a few of them.

Some years since a philanthropic individual created a fund for one of our colleges, the proceeds of which should be annually ex-

pended in giving a testimonial to the student who could show the highest record in gentlemanly deportment. That a reward should be offered for the practice of courtesy, in which no youth who has proper self-respect should for an instant fail, shows that there must be considerable ignorance on the subject or a rather low standard in practice.

A traveler in France writes, "I have observed in the humblest peasantry more graciousness of manner, and more kindly regard for the comfort of others, than among many of those who in our country pride themselves upon their social position." Speaking of a poor artisan, he says: "His appearance was poor and mean, but his manners would have adorned a palace."

An English writer says of the Russians: "There are no more finished specimens of noble manhood than may be found among the cultivated Russians. A Russian gentleman will bow as respectfully to those who serve him, as to the noblest noble of them all."

Travelers in Japan speak of this nation, whom we have been accustomed to regard as scarcely civilized, as far beyond us in the observance of the forms of politeness. Even the street coolie will beg pardon of every one whom he meets or passes. This humble apology for the liberty of existence in your presence seems menial; but if it proceeds from kindly regard for the comfort and convenience of his fellow-beings, it does him credit, and certainly tends to develop this feeling.

Americans neither need nor wish to cultivate a mean, cringing, subservient manner; but we covet for our people that lofty self-respect which will not allow them by word or look to treat another slightingly, which is too proud to take advantage of another's weaknesss or humble position, which is too noble to have respect merely to the paltry pelf,

> "Which will sicken and pale
> At the gateway of pearl,
> Though current on earth."

Even a child is entitled to personal respect, and surely every human being, high or low, has thus much claim upon us, and will rise in the scale of humanity in proportion as he receives it.

Respectful appreciation of others is not without its reward. Honest John Ridd, of Exmoor, observes upon meeting some strangers: "The Baron rose as we entered, while the Colonel turned on his chair and struck one spur against the other. I am sure, without knowing aught of either, we must have reverenced the more of the two, the one who showed respect to us."

Macaulay relates an instance of the noble courtesy of Louis XIV. when James II., the self-deposed monarch of England, became his guest for a season: "Louis received the destitute exiles with chivalrous generosity, and endeavored in every way, by the utmost delicacy, to lighten the load of obligation he laid upon them. He gave orders that the queen should receive all the marks of respect that had ever been paid to the queen of France. He would not allow the Princes of the house of Bourbon to be indulged with chairs in her presence. In public he gave the seat of honor at her right to James, while he modestly placed himself at her left." As Macaulay remarks, "Such an instance of magnificent courtesy has perhaps never been exhibited to the world."

Our own annals, however, furnish us with an instance in the life of the "Father of his Country," of which we as Americans may well be proud. A poor slave, it is said, as the General passed, lifted his hat and bowed reverently. Washington graciously returned the salute. One of his staff remarking upon this, he replied, "Would you have me outdone in courtesy by an ignorant slave?"

The "grande monarche" did himself much honor in that he treated an equal so generously. To our common humanity a higher and nobler ideal is furnished in the latter instance.

COURTESY OF MANNER.

COURTESY of manner is one of the greatest essentials to a teacher or any one who aims at success in guiding children on the road to knowledge. Not that they should go through all the formulas that Chesterfield lays down as essential to intercourse between ladies and gentlemen; but they must show a studied kindness for their welfare, and a regard for their feelings, which is shown to far too little an extent. And there is a great deal in the tact which leads children to think that they are having their own way. It is easy for a teacher to say that a child must and shall; but it always leaves a trace of rebellion long after the hard words are spoken, and the will of superior force and years has been carried into effect. But it will be found far easier to adapt yourself to means and dispositions, and be kind and gentle, and deferential to wills that are quite as strong as your own, if not to judgments that are not as matured. Every

parent and teacher should possess extensive knowledge of human nature as manifested in children. Sensible and cautious, they should know when to censure and when to praise, when to rule their passions, when to guide their affections, and when to direct and govern their ambition. Kindness of disposition and courtesy of manner will enable them to rule the young without difficulty.

Let every teacher, therefore, endeavor to possess these noble and amiable characteristics. In public or in private he should so act as to merit and win confidence and esteem, instead of aiming to show his power and importance at all times. When he meets his pupils he should recognize them courteously, with smiles, not with frowns; with kind and affectionate looks, not with a stern countenance. He should teach his pupils politeness, not only by precept, but still more by example. He should impress upon their minds the duty to rise up before the hoary head, and honor the face of the old man. In these fast days, when youth holds such undoubted sway, there is too little respect shown to old age. We are too often found in the place of the Athenians in the ancient story which teaches what true politeness is.

On the occasion spoken of in the story, a number of Greeks assembled at an Athenian theatre. The Spartan ambassador and his countrymen were seated in a part of the house opposite to that assigned to the Athenian aristocracy. During an interval in the play, an old man, a citizen of Athens, came in, whose head was white with the snows of age. The young Athenian aristocrats resolved to have a joke at his expense, and pretending to make place for him, beckoned that he should come over to them and take a seat. He did so; but when about to sit down, the unmannerly youths closed upon either side, and re-occupied the vacant space. They then laughed at the disappointment of the old man. The gallant young Spartans having observed this rude and insolent behavior, instantly rose and remained standing, whilst one of their number went over to the old gentleman, and kindly offered to conduct him to a seat. The old man, leaning on the arm of the noble youth, crossed to the other side of the house, when he was requested to take the most honorable seat. Having done so, the young Spartans quietly resumed their seats.

The spectators in the galleries observing this noble conduct, loudly cheered the Spartan youths, and the rude Athenians, now blushing at their own conduct, held down their heads with shame. After the cheers had subsided the venerable sage arose, and after th ing the Spartans for their polite attention example, said in the language of the poe

The Athenians learn their duty well; but lo
The Spartans practice what the Athenians k

SCHOOL SHOPS.

THE departing generation will never ce to interest itself in the one that is a vancing to take its place, and if it wo leave the impression that it has fully done duty in the world it will not omit any reas able preparation for the world's lasting i provement. Skilled industry being the s stantial foundation for all advances civilization, whatever provides for that as leading and abiding interest of man in social state takes care practically of all that to follow. The Ruggles plan for the estab lishment of Developing Schools and Scho Shops for lads who are just leaving schoo appears to contain within itself, in the vie above stated, all the promises of public pro perity and progress. Morals without the sustaining substratum of industry become a speculative affair at the most; they need to be reduced to practice by those agencies which steadily hold us all to the necessities of life. And so the best thing to give a lad on leaving school is a knowledge of practical mechanics, that he may be able on entering life to help himself by being useful to others. All cannot go to college, and it is probably best that they cannot; but all who come out of the public schools may be qualified to become valuable members of the community, which is no more true of such as graduate at colleges than of those who do not. The word education is evidently about to assume a larger meaning. It must, in the future, imply a knowledge of the means of gaining a livelihood as well as a knowledge of languages and accounts. Until that is the case, it is a process that is broken off before it is fairly begun.

The simple fact, says the *Boston Post*, that our public schools every year turn out boys of the age of fifteen or sixteen, who from that time are of no use to themselves or anybody else, because no one has put them in the way of being useful, ought to fix the necessity for just such a system of mechanical instruction and training as the Ruggles plan contemplates. If we are to remain a republican people, too, mechanical industry is to be held as a prominent condition of that state. But now a

boy blunders into a calling instead of finding his way to it instinctively; and in the lamentable majority of cases boys never find the occupation at all for which they are adapted, but drag on to the end of their days without either aim or enthusiasm. It is a fatal waste of force and freshness for society. By opening the door to an honorable vocation as soon as a lad leaves school, not only is no time lost but the countless temptations to vice which lurk everywhere in a state of idleness are removed. Man was made to use machinery and tools. They give him the sense of larger power and dignity. Let him be introduced to a personal knowledge of them in early life, and the value of that whole life to himself and others is increased in the most wonderful manner. There could be no truer charity, as well as far reaching policy, in making provision for the career of the young in usefulness to themselves and the community. Of the details of Mr. Ruggles' plan of school shops we have spoken before, and recur to the subject again only to assist in keeping alive and enforcing what must sooner or later be adopted as the simple duty of a civilized community.

EXAMINATION QUESTIONS.

THE following are some of the questions from recent State examination papers of Indiana and Illinois:

READING.—What knowledge of words should a child gain from the study of his first reader?

"Insects generally must lead a jovial life. Think what it must be to lodge in a lily. Imagine a palace of ivory and pearl, with pillars of silver and capitals of gold, and exhaling such a perfume as never arose from human censer. Fancy again the fun of tucking one's self up for the night in the folds of a rose, rocked to sleep by the gentle sighs of summer air, nothing to do when you awake but to wash yourself in a dew-drop, and fall to eating your bed-clothes."

Pronounce and analyze phonetically the following words: *insects, generally, palace, exhaling, again.* Name and state the principles in accordance with which *d* and *s* in the words *rocked* and *fields* are sounded. Find the etymological meanings of the words *insects, capitals.* What is a *capital?* (as meant here.) A *censer?* What is the connection in thought between the first sentence and those that follow? What is there about a lily to remind one of a palace of ivory, etc.? Force of the word *again?* What is here meant by bed-clothes? What do you infer about the knowledge and tastes of the author of this selection? What is the best way to get a knowledge like his of the lily? What is the test of good reading of selections of this style?

PENMANSHIP.—With what materials should each member of a writing class be supplied? Describe the position of body, arms, hands, and feet, which you would have pupils assume for writing. Describe also the position of pen and copy book. How many movements may be employed in writing? Name and describe them. What is the value of movement in writing? What is the unit for measuring the height of letters? What is the unit for measuring their width? What is the rule for spacing and combining the small letters? Make the three classes into which the small letters are divided on the basis of vertical height. What is the height of the capital letters above the base line?

GEOGRAPHY.—What one of the United States has an eastern and a western river boundary? Give its boundary. How many degrees from the Tropic of Cancer to the Arctic Circle? Give the proof. State three proofs that the earth is spherical. What causes the isothermal lines to bend so far to the north between Labrador and Norway? Explain. Name and locate three mountain systems of Africa.

GRAMMAR.—Write a sentence in which each essential element has a modifier. Designate. What different kinds of modifiers may a verb have? Arrange correctly and punctuate the following sentence: "On Wednesday evening, by Mr. Gough a lecture at the old brick church was delivered on temperance." Write sentences in which a simple word, a phrase, and a clause are each used as objective modifiers. Of what value is an exercise in parsing? Write a sentence in which an infinitive is used as a noun. Parse the infinitive. Analyze the following: "I love to lose myself in other men's minds." How are sentences classified in respect to their meaning? Write one or more sentences in which a direct and an indirect quotation is used. What is a complex sentence?

HISTORY.—When and by whom was the Hudson river discovered and explored? State the importance of this discovery in a commercial and in a political point of view. What provisions were made in Virginia and in Massachusetts for common and for higher education during the colonial period? When was the government of the United States organized under the present constitution? What were the leading forms of industry in the different sections of the country at the time of the adoption of the constitution? What were the boundaries of the United States at the close of the war of Independence? What are they now? What connection can you trace between the occupation of the people of the United States and the acquisition of territory west of the Mississippi river? What territory was first acquired after the organization of the government? Under whose administration? How was it acquired?

ARITHMETIC.—What number must be divided by one-half of 90 to produce three-fourths of 228? What is the use of the cipher in writing numbers? What does the product of all the common prime factors of two or more numbers produce? If two men are 50 miles apart and travel toward each other, one going 3⅓ miles per hour, and the other 3½ miles per hour, in what time will they meet? What part of the distance will the first one travel? Multiply seventy-eight ten thousandths by five hundredths; divide the product by thirteen thousandths, and reduce the quotient to a common fraction in its lowest terms. What will be the cost, at $6.50 per cord, of a load of wood consisting of two lengths of four feet each, the load being 2 ft. 9 inches wide, and 3 ft. high? If a man uses a pound of fertilizers on a piece of ground two yards square, how much will be used for ¾ of an acre? Five cents per day is the interest on what sum at 7 per cent. per annum? Write a promissory note, observing the following conditions: Date, to-day; face, one hundred and fifty dollars; maker, John Jones; payee, George Green; make it negotiable, drawing 10 per cent. interest, and payable in six months. If a man's property is assessed at $5,125, and his State tax

is five cents on a thousand dollars, his county tax one-half cent on a dollar, his school tax three mills on a dollar, and his poll tax three dollars, what is his whole tax?

PHYSICAL GEOGRAPHY.—What is the difference between the equatorial and polar diameters of the earth? What is the common explanation? To what is the term *rock* applied? What is the difference between igneous and aqueous rock? To which of the two does common sandstone belong? When are rocks stratified? What are fossils? Speak briefly of the plains of South America. Compare Labrador with England in respect to latitude and climate; explain difference of climate. Since the earth is nearer the sun in winter than in summer, why is not the climate of Illinois warmer in winter than in summer? Explain the formation of dew. Explain why the mercury in the barometer stands high in fair weather, and lower on approach of a storm. How are hail-stones formed? Explain the existence of granite boulders over the northern parts of this State. Locate the principal deposits of coal, iron, salt, gold and copper in the United States. Whence do we obtain tin?

PHYSIOLOGY.—What is digestion? How does the nutritious portion of the food find its way into the blood? What is the office of the veins? Of the arteries? What is the difference in their appearance? Locate each of the following parts of the body and tell what it is: humerus; pharynx; duodenum; aoria; esophagus. What change does the air undergo in the lungs? Describe the structure of the eye by which the amount of light is regulated. Name the parts of the cerebro-spinal system. What is its office? What changes take place in the bones as a person grows older? What is the cuticle or scarf-skin? Its office? Where are the maxillary glands? What is their office?

COMMON THINGS.—What is a section of land? Give its size and shape? Who is governor of Illinois? President of the United States? What do you mean by the State Legislature? Name the branches of which it consists. Which is heavier, a pint of tallow or a pint of water? A surface four feet square equals how many surfaces two feet square? What is a milk tooth? Does it ever have a root? Name some cloven footed animals. Name an animal which chews the cud. Which is the larger, the sun or the moon? Which is farther away? Name three forms in which water exists. Does the sun move around the earth, or the earth around the sun? Name the autumn months. From what animal is veal obtained? From what grain is hominy made?

THEORY AND PRACTICE.—How would you use the windows of a school room to secure ventilation? To what extent is a teacher responsible for the care of school property? What measures do you use to prevent tardiness? What is your opinion of the system of place taking, or "going up," in classes? Why? Under what circumstance, if any, may ridicule be used as an incentive?

LETTER WRITING.—*Time, 1 hour.*—Write a letter of not less than ten lines, exclusive of date, address, and signature, about Christmas, telling how you spent the last one; or, you may tell any fact you have learned during the past week, either from books or elsewhere.

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, MAY, 1878.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

THE State of Texas has been extremely liberal in laying the foundations of a school fund which in a few years will provide amply for the education of all the children of the State. It gives for the purpose of constituting a permanent school fund, all the alternate sections of land reserved out of grants heretofore made, or that may hereafter be made to railroads, etc., also one-half the public domain of the State, and all money that may come to the State from any portion of the same. It also sets apart annually not more than one-fourth of the general revenue of the State, and a poll-tax of one dollar upon each male inhabitant between the ages of twenty one and sixty years, for the benefit of the public schools. In August, 1876, the permanent school fund amounted to $39,847.91 currency, and $3,030,852.95 in bonds. In addition to this, the school fund has about eight millions of acres of alternate sections of land located by railroad and other companies, and over thirty millions of acres under the clause, "half of the public domain of the State," which at the minimum price at which it is allowed to be sold, viz.: $1.50 per acre, would realize $57,000,000.

THE excursion to Europe advertised in this number of THE JOURNAL is one of the best planned that has yet come under our notice, and it will be one of the most successfully managed of the season. The sum of four hundred dollars will cover all expenses of travel and hotels, everything to be first-class in grade. A full descriptive circular may be had from Prof. O. R. Burchard, Fredonia, New York.

Messrs. Geo. J. Luckey, Henry Houck and Dr. Geo. P. Hays, who were named as a committee of arrangements for a teachers' excursion from Pennsylvania, announce that the National Line of Steamers, sailing weekly from New York to Liverpool and London

will carry Teachers to the Paris Exposition and back, at the following rates: From New York to Paris and return, *via* London, for $110 in gold; or from New York to Paris and return, *via* Liverpool, for $135 in gold. Parties landing at Liverpool will be furnished free passage through England to London, thus giving them an opportunity to see the most lovely part of old England. The main excursion will leave about the 6th of July, but parties can leave at any time after the 1st of May. Steamship tickets good for twelve months; but Excursion tickets from Liverpool or London to Paris and return, good only for one month. Persons wishing to join the Excursion should give immediate notice (the sooner the better), and advance $25 each to secure berths; the balance to be paid within four weeks of sailing. Those who have paid the full amount within four weeks of sailing, and will then be unable to depart, should give at least two weeks' notice to J. J. McCormick, Agent, so that their berth may be sold; and if sold all money will be refunded except $5; or otherwise, if the berth engaged should not be sold, timely notice not having been given, $60 will be forfeited. Due notice will be given in the educational journals of the time of sailing of the several vessels of the line. Any one desiring further information, can obtain it by addressing J. J. McCormick, Pittsburgh, Pa., the agent of the Company, or any member of the Committee.

THE Summer School held last July and August, at the West Chester State Normal School was so succeessful that the trustees have determined to hold another session during the coming summer, and add new features to the course. The object of this special school is to bring the best instruction, the country affords, within the reach of teachers who are occupied during the regular sessions of colleges and special schools, and to combine in one course the studies most in demand by the advanced grade of teachers. Prof. Bailey, of Yale College, who will have charge of the department of Elocution, stands at the head of his profession. Prof. Buckhout is a gentleman of fine attainments, and unusual ability as a teacher. He was a student under Prof. Gray, of Harvard, and was distinguished for his proficiency in science. Prof. Carter, of the Normal Art School of Massachusetts, is strongly recommended by Prof. Walter Smith as one of the best teachers of Drawing in New England. English Grammar will be taught from a philological standpoint, and teachers will have an opportunity to trace out the growth of the language and thus be able to understand the true construction of many idioms heretofore obscure and difficult. Prof. Wm. B. Owen, of Lafayette College, who has charge of this branch has been a student under Prof. March, and is especially selected by him as peculiarly fitted to instruct in this department.

In addition to the above, teachers will have an opportunity to study Chemistry, Physiology, Mineralogy, Latin, English Literature and Mathematics. Summer schools of science are common in New England, but this is the only school we know of in which the different branches are thus combined to meet the needs of practical teachers.

WE have received from the County Superintendent the "Manual of the Public Schools of Clarion County, Pennsylvania, for 1877–78." The Manual has been compiled with much care, and contains the names and addresses of the presidents and secretaries of the Boards of Directors, list of teachers in each district, with the names of their schools and the number of their pupils, a summary of the school statistics of the county, the course of study with full details adopted for the ungraded schools, the constitution and by-laws of the Clarion County Educational Association, an account of the district institutes, an article on ventilation of school houses, forms for monthly reports to the County Superintendent and to parents, a programme of exercises for a school, with numerous additional remarks and suggestions. The whole constitutes a neat pamphlet of some fifty pages. It is creditable to the compiler and to the county, and must add strength to the cause of education.

PROF. ELIAS SCHNEIDER, well known to many readers of *The Journal*, has worked out a new theory of the tides. Two articles of his appeared on this subject about a year ago in Appleton's "Popular Science Monthly." These articles awakened considerable discussion, the result of which, we are glad to say, is likely to be favorable to Prof. Schneider's views.

Prof. Simon Newcomb, LL. D., one of our most distinguished scientists, and connected with our national observatory at Washington, has quite recently published his "Popular Astronomy," and in it the old theory is abandoned, and the one defended and presented to the world three years ago by Prof. Schneider, is found in its stead.

According to the old theory, the superior attraction of sun and moon, on one side of the earth draws the earth, in effect, away from the waters, on the far side, and which being left behind are thus heaped up at that part of the earth's surface, as well as by direct attraction at that part of the earth's surface which faces sun and moon.

The *new* theory teaches that the tides are caused by the earth's *own* motions; that centrifugal force, produced by the earth's motion around the central sun, causes the solar tide on the side of the earth turned away from the sun; and, that the centrifugal force produced by the earth's motion around the centre of gravity between herself and the moon, causes the lunar tide on the side of earth turned away from the moon.

INDUSTRIAL EDUCATION.

ELSEWHERE, as in Pennsylvania, the question of industrial education is attracting attention. The following are the proceedings of a meeting recently held in Boston. They are interesting as touching the very same points that elicit discussion here.

A special committee of the Boston School Board, consisting of George A. Thayer, Abby W. May, and John G. Blake, gave a hearing Friday afternoon, at the rooms of the Board, on a request of the Industrial Educational Association that its school property be purchased by the School Committee, and its school conducted at the expense of the city. A small audience was present.

Rev. George L. Chaney introduced the matter, and said that the Industrial Educational Association had, during the year, established and perfected a plan for educating boys in the use of mechanical tools. They had a school at present occupying a room in the city building on Church street, which had been fitted with desks and supplied with a few tools, and it was de sired that the trial begun by the Association might be continued by the Committee. The only requirement for entering the school was a disposition on the part of the pupils to attend it. The boys attending the school are of the age of 14 years and upwards, and some of them come from a considerable distance. The interest in the work, he thought, was the attraction which brought the boys together, and many carpenters had expressed great surprise with what the pupils had learned in the few lessons they had received.

Henry Grew addressed the committee in regard to the cost of the school. He said the greatest expense had been in procuring the benches and the necessary outfit, but the total amount expended did not exceed $750, which provided carving tools for thirty-two boys, and included fuel, lights, etc. This year the Association intended to have more room, but would probably not expend over $950. The number of pupils, however, would be eighteen.

Mr. Rowell, superintendent of the school, spoke in reference to the work done by pupils. Their instruction thus far, he said, had been in the use of the saw, bit, brace, hammer, etc.

President Runkle, of the Institute of Technology, was then asked to state, in his opinion, how far such a method of industrial education could be introduced into the public system of education. Mr. Runkle spoke at some length. He said the time would come from necessity when the means of obtaining a livelihood would be taught in the public schools. The opinion to-day among the boys is that they are to be educated to get their living by their wits, and not by work. He was fully convinced that such a system of education could be practicable. He believed an industrial education should be made compulsory, and it was an educational marvel that so great results can be achieved with so little instruction.

Mr. Page, master of the Dwight School, said he was very much in favor of industrial education. He strongly believed a system of manual labor could be introduced in connection with each school. A similar opinion was also expressed by Mr. Hardon, master of the Shurtleff School.

Dr. Wellington noted a case in which a system of manual labor had been introduced into a primary school and made practical.

Professor Whittaker, of the Institute of Technology, spoke of the success of the system of manual labor in that school.

The hearing then closed. The special committee took the matter into consideration, and will report at a meeting of the School Board.

WRITTEN EXAMINATIONS.

THE Canada *School Journal*, Toronto, advises persons undergoing examination by the written method to observe the following rules:

1. *In preparing for an examination, write out as much as possible of the work.*—Writing is a much more effectual mode of study than reading. Let a student write out from a book several times any difficult proposition, and he will find that he has gained more knowledge of the proposition than he could have gained in a much longer time spent in merely reading it. The method of writing, which appears slow and laborious, is in reality an important economy of time and labor. In studying Euclid, for instance, write out a proposition from the book, then write out the same proposition and carefully compare with the book. In this way you will gradually acquire Euclid's style. Time is an important element in an examination. When you have learned to write out a proposition accurately, learn to write it out rapidly. You should write out a proposition of Euclid in ten minutes. Many can do it in a much shorter time.

2. *Write about the question before you, and not about something else.*—No knowledge, however correct, if it does not bear directly on the question, can be taken into account When a candidate writes very litttle about the question, and very much that is foreign to it, the examiner will conclude that he knows but little about it, and that he is simply trying to hide his ignorance by a show of knowledge. For example, the following question is asked, "Sketch briefly the history of the Long Parliament." The candidate writes very fully about the Civil War, gives the victories of Oliver Cromwell in chronological order, and

concludes with a pathetic account of the execution of Charles I. Such an answer is not what the examiner wanted, and of course he gives no credit for it whatever. It is worse than no answer at all. It shows that the ignorance of the candidate is compound. He is not only ignorant of the question, but is not even aware of his ignorance.

3. *Let your answers be short and to the point.*—Of course your answer must be sufficiently long to express what the question requires, but the fewer words beyond that the better. Reading examination papers is not amusing work, and no examiner wishes to read more about a question than is just sufficient to answer it. Never solve a question by two methods. You will get credit for only one, no matter how many you may put down. You will not be heard for your much speaking. Clearness of statement is of the utmost importance. Many an answer that has contained much correct matter, far more indeed than enough to have answered the question correctly, has been marked low, or perhaps received no marks at all, simply because the examiner could not unravel the mystery in which the candidate had involved his answer.

4. *On receiving the examination paper, read it all over carefully once or twice before you begin to write.*—On first reading the paper you may, perhaps, think that there is not a question on it that you can answer. This is the result of mere nervousness. On considering it for a short time, you will find that light will begin to dawn upon you. Take the easiest question you can find on the paper, and write the answer to it as carefully and as quickly as you can; then the next easiest; and so on till you have done them all, or until you can do no more. You will find that towards the end you will be able to understand and explain what at first appeared altogether incomprehensible to you. There is no more constant source of failure at examinations than, the attempt often made by candidates to answer in order the questions on an examination paper. In this way he is frequently brought in contact with the most difficult question first, puzzles over it till his mind gets into the state of that of young Dombey, who was not certain whether it was twenty pennyweights made one ounce, or twenty Romuluses made one Remus.

5. *Give the full work of each question, and do the work on the paper you are going to hand in to the Examiner.*—The examiner wants to see the method by which you obtained the result much more than the result itself. Even if your final result is wrong, but the method of obtaining it be correct, he will give you credit for what you have done, which he could not do unless he had the full work before him. Never work on a slate or slip of paper, and then copy. By this method you lose more than half your time, and you are far more liable to make mistakes in copying the work than in doing it.

6. *Generally speaking, write the answer to each question on a separate page.*—By doing this you will be able to arrange the questions in order when you have finished. Fasten the sheets together at the left hand corners. Do not leave the examination room till the time is up. If you cannot do any more questions, read over what you have done. You may detect and correct mistakes. Do not sit up late the night before the examination to *cram*. Study but little during the examination week. All that you may learn in this way will do you more harm than good. You will be tempted to write too fully on what you have so recently learned, and your mental vigor will be seriously diminished. Five or six hours a day in the examination room is quite sufficient for most persons, without additional reading or study.

7. *Attend carefully to the style of your answers.*—"Dress does not make the man," says the old proverb, to which some person adds, "Of course not, but when he is made he looks much better by being dressed up." Style does not make the answer, but when it is made it certainly "looks much better by being dressed up." When you find a complicated mathematical question on an examination paper, you may be sure that there is some easy method of solution. If you cannot find such solution, leave the question to the last. Examiners set questions to test your knowledge of principles, not your ability to do mere mechanical work.

PROF. HUXLEY ON EDUCATION.

FROM Prof. Huxley's address delivered at the opening of the Johns Hopkins University, at Baltimore, we make the extracts found below on Elementary Education and the relation it bears to the education furnished by the University. We are gratified to have the endorsement of an authority so distinguished in regard to a doctrine which we have long maintained as a cardinal principle of educational philosophy. This doctrine is: *That the course of study in a primary school should embrace all the branches that are taught in the University.* In other words, that a little child should be made acquainted with the *elements* of all the sciences and all the arts that go to make up the curriculum of the very highest institutions of learning. The whole work of education is dwarfed beyond measure by the narrowness and the poverty of the teaching in our lower schools. Each of them should be considered a little University, wherein the elements of all human knowledge are to be taught. But of this, again. Hear Huxley:

ELEMENTARY EDUCATION.

I think there are two aspects under which we may consider a University. It is, in the first place, a teaching institution; and it is, in the next place, an institution for advancement and increase of knowledge. Under the first aspect, it is obviously and clearly connected with the general system of education; and it stands in some definite relation, or should stand in some definite relation, with the primary school, with the elementary school, and therefore it may behoove us to consider, in the first place, what elementary education should be taught. For in the view which I hold, the University, as a department of the primary school, simply places a crown and a summit upon the education which is given in the primary school. As to what should be the nature of elementary education, I have long held opinions which are, I am happy to say, becoming more popular than they once were, but which still may diverge a good deal from ordinarily received ideas. I am of opinion that an elementary education should discipline all sides of the mind, and should leave no important faculty uncultivated.

At its foundation lies a knowledge of the English

language, the tongue we speak, power of reading, power of writing with accuracy and ease, and, finally, that amount of cultivation, of taste and judgment, which is to be derived from the study of the higher English authors.

I think, again, that it is an essential part of elementary education that the scholar should learn at any rate the elements of the history of his own country. It is hard for any boy or any girl who has not lived a life to understand history—perhaps impossible, but nevertheless it is useful; for the mind should be furnished those fundamental facts. I look again upon the elements of the physical sciences as a fundamental part of elementary education. The elements of physical geography, the elements of physics, the elements of chemistry, the elements of human physiology—all these are matters of great and increasing moment, and there is no reason why they should not be taught in our elementary schools as well as the mass of things which are taught in our institutions—elementary mathematics, arithmetic and geometry. I should be disposed to think that archæology is best taught practically—not so much theoretically as practically.

And, finally, I conceive that it is an essential part of elementary education that the æsthetic faculty should be trained; that some knowledge of music should be given, and that every one should be taught to draw according to his capacity. In these matters of art, people vary indefinitely in their individual capacity. You cannot make an artist of anybody who is not born one. You may make an appreciator of art, and a useful knowledge of art may be acquired by those who possess but a very small innate capacity. Such education should enable an average boy of 15 or 16 years to read and write his own language with ease and accuracy, and with a sense of literary excellence derived from the study of our classic writers; to have a general acquaintance with the history of his own country, and with the great laws of social existence; to have acquired the rudiments of physical science, and a fair knowledge of elementary arithmetic and geometry. He should have obtained an acquaintance with logic rather by example than by precept, while the acquirement of the elements of music and drawing should have been pleasure rather than work. It may sound strange to many ears if I venture to maintain the proposition that a young person, educated thus far, has had a liberal, though perhaps not a full education.

It seems to me that such training as that to which I have referred may be termed liberal with perfect accuracy, in both the senses in which that word is employed. In the first place, it is liberal in breadth. It extends over the whole ground of things to be known and of faculties to be trained, and it gives equal importance to the two great sides of human activity, art and science. In the second place, it is liberal in the sense of being an education fitted for freemen—for men to whom every career is open, and from whom their country may demand that they should be fitted to perform the duties of any career. I cannot too strongly impress upon you the fact that with such a primary education as this, and with no more than is to be obtained by building strictly upon its lines, a man of ability may become a great writer or speaker, a statesman, a lawyer, a man of science, painter, sculptor, architect, or musician. That even development of all a man's faculties which is what properly constitutes culture, may be effected by such an education, while it opens the way for the indefinite strengthening of any special capabilities with which he may be gifted. In a country like this, where most men have to carve out their own fortunes, and devote themselves early to the practical affairs of life, comparatively few can hope to pursue their studies up to or beyond the age of manhood. But it is of vital importance to the welfare of the community that those who are relieved from the need of making a livelihood, and still more those who are stirred by the divine impulse of intellectual thirst or artistic genius, should be enabled to devote themselves to the higher service of their kind as centres of intelligence, interpreters of nature, or creators of new forms of beauty; and it is the function of a university to furnish such men with the means of becoming that which it is their privilege and duty to be.

OBJECTS OF THE UNIVERSITY.

To this end the University need cover no ground foreign to that occupied by the elementary school. Indeed it cannot; for the elementary instruction which I have referred to, embraces all the kinds of real knowledge and mental activity possible to man. The university can add no new departments of knowledge—can offer no new fields of mental activity; but what it can do is to intensify and specialize the instruction in each department. Thus literature and philology, represented in the elementary school by English alone, will extend in the university over the ancient and modern languages. History, which, like charity, best begins at home, but, like charity, should not end there, will ramify in the university into the history of other countries, theology, and numismatics, and all matters bearing thereupon; and in a well-constituted university we have as adjuncts to these two lines of study libraries containing necessary books. So, again, science, represented by the mere study of its rudiments in the elementary school, will in the university be represented by a complete faculty in which such sciences as those I have enumerated will be taught and carried to their highest extent by special professors, and where instructions given in the lecture-room will be supplemented—and this is the most essential part of the proper teaching of physical sciences—where that teaching in the lecture room will be supplemented by practical work in a duly constructed laboratory under the superintendence of the demonstrators.

So understood, the study has that which makes it different from other disciplines, namely, the bringing of the mind of the student in direct and immediate contact with fact, so that it does not depend upon treatises but upon actual conception of Nature as she is. And that is only to be given by the addition of practical laboratories to the ordinary appliances of teaching. So I need hardly say that the English language in another direction, which is some basis for philological study in the school, will branch out in the study of all the ancient and modern languages, regarded as a matter of philology and not of literature; and in any thoroughly constituted university, I should hope to see and think essential there as a part of this, art, in immediate relation with the institution's new elements. Not only the elements, but the greatest refinements of art could be taught—the rudiments of music and schools of the plastic and pictorial art and architecture. Having elementary schools of the kind to which I have referred at one extremity, and the University at the opposite extremity, we should have the Alpha and Omega of education—the alphabet complete. Under some circumstances and in some countries, it is desirable to have what I have called

elementary education divided into a primary and a secondary school. In other cases it is not essential, but that is a matter of secondary importance.

THE SCHOOLS OF LONDON.

WE have before us the Annual Statement made by Sir Charles Reed, its president, to the school board of London, on the 26th of September, 1877. We propose to make such extracts from it as will be of most interest to our readers.

By the census of 1871, there were 574,693 children of school age in London. At that time there was room in the school houses of the city for only 262,693 of them. The voluntary schools now provide for 284,774 and the school board for 220,549.

The only change recently made in the school-buildings is in the way of "stepping" the floors, it being found that a teacher can better command a large number of pupils when each row of desks is placed on a higher level than that immediately in front of it.

Each school-house has a playground attached to it. Provision for these playgrounds has been very expensive, but the president of the board says that it is "amply justified when it is remembered, not only how indispensable playgrounds are for purposes of drill and recreation, but that they exert a distinct educational force, giving to the teachers an opportunity of coming to know their pupils personally, and of exerting that close influence by which, to a large extent, character is formed and moral training secured."

The public schools of London are not free. Fees are charged by the board amounting to from 1d. to 6d. They are uniform in each school, but not in the schools as a whole. The children attending schools in the poorer sections of the city are charged the smallest sums. The payment of fees does not seem to keep many children away from school.

The London school board employs two classes of teachers, masters and apprentices or pupil teachers. The masters hold certificates of different grades, and of course occupy positions of different ranks. Each head master is required to instruct his pupil teachers in the art of teaching. There are nearly two thousand pupil teachers in the schools, but the system does not seem to work well. A close observer of it says: "The scholars chosen for apprenticeship are nearly always very young, often ill-educated, and thus very poorly adapted for a long time to teach others; in this way a large number of young pupils are brought into the work quite irrespective either of their educational or scholastic capacity, who therefore not unfrequently prove a dead weight on the school during the larger portion of their apprenticeship, and are never able to fit themselves for teachers afterwards."

The schools of London have a very efficient system of inspection. A sufficient number of inspectors are employed to keep up a regular system of visitation and reports.

Needlework and cutting-out garments are taught in all the girls' schools. Special schools for domestic economy, cookery, swimming, etc., form a part of the public school system.

Incorrigible truants and bad boys and girls are sent to what are called Industrial Schools, or placed on board of Training Ships. There, as here, compulsory educational laws do little good, unless some way is provided of removing the children from evil influences.

Two half-time schools have been established for children who work in factories, etc., and the results seem very satisfactory.

The cost of the London system of public instruction is very considerable, but the board claims that in consequence of their efforts great reductions have been made in the amount of juvenile crime and pauperism. The governor of the Holloway prison reports that the juvenile criminal population has constantly decreased since the adoption of the present school system. In 1869, he received 136 males and 21 females, while in 1877, there were commitments of only 28 males and no females.

NEGLECTED CHILDREN.

THEIR TREATMENT IN MASSACHUSETTS.

WE have before us the annual report of the public schools of the city of Holyoke, Massachusetts. From it we have learned a lesson which we would be glad to see turned to profit in Pennsylvania.

The city has a population of some twelve or fifteen thousand. The public schools are open ten months in the year, with an attendance during the past year of 1,284. The school organization is similar to such organizations in this state, with boards of directors and a superintendent. In addition, however, there is an official called a Truant Officer, and it is to his work that we desire to call special attention. Under the laws of Massachusetts, it is the duty of the Truant Officer to ascertain how many children there are within his jurisdiction and whether they attend school, or are receiving an education, or otherwise; and if he finds any growing up

neglected or in ignorance he is required to apply a remedy, mildly if he can, forcibly if he must. The Truant Officer at Holyoke the past year attended to 1,673 absences from school reported to him, he notified parents in 1,504 cases, he returned to school 196 children found in the streets, made 22 temporary arrests, and had three children committed to the State Primary School at Munson. In addition he took the census of the children and found the number between the ages of five and fifteen to be 2,523, of whom 1,284 were attending public schools, 972 private schools, 184 did not attend any school, and 83 were reported at work. Of those not attending school, 108 were between the ages of five and seven years, 70 were brought into school, and 6 were kept at home to mind the house while their parents were at work. 59 children were found employed in various manufacturing establishments, and arrangements were made to secure them school privileges. These, we think, are valuable results.

The Superintendent of schools, Mr. Marvel, has the following remarks on

TRUANTS AND TRUANCY.

The report of the truant officer will show what he has done to cause pupils to attend school, and indicates that something has certainly been accomplished. The great difficulty to contend with, is how to provide for those who must be sent to a reformatory school, as there is considerable objection, on the ground of expense, to sending many pupils away. Some whose home influences and associations are bad, and some who have broken away from parental restraint, and are already in childhood versed in many of the arts of vice and crime, are to be dealt with. It cannot be economy to allow these children to spend their time in vicious indulgence and surrounded by physical and social defilement, until the habits of violent thoughts and criminal actions have caused them to commit offences which cost the community, in property, more than the support of hundreds of children; while some of them may be guilty of the deeper crimes against human safety and human life.

The question, "Can we afford to support such children in reformatory institutions?" can best be answered by asking two others: "Can we afford to educate them as criminals and suffer the consequences of their misdemeanors?" and, "Are they so susceptible to good influences as to reform their lives under proper conditions?"

The subject is too broad and suggestive for us to attempt an exhaustive discussion in this report, but the following selection from an article on "Education in the United States" is an admirable digest of the leading arguments in favor of education as a preventive of crime:

"That education is the bulwark of the nation is no new doctrine, and educated people generally so regard it. Hence its benefits should be disseminated without stint, in such wise that even the uneducated may see and know that the weal or woe of every community depends upon it. If children are not properly educated at school or at home, they are educated in the highways and streets; if not instructed by duly qualified teachers or parents, they are instructed by companions older than themselves in ignorance and wickedness; if not educated in virtue, then in vice; and *this* is much more thorough and efficient of its kind than that which is obtained in the schools. Ignorance and vicious training are the common parents of crime; and criminals destroy wealth instead of producing it, and become a tax on society at large. The practical fruits of education *out* of school are to be seen in our criminal calendars all over the country; and the expense of this kind of education is to be estimated in the appropriations for sustaining police, criminal courts, jails, penitentiaries, and almshouses, to say nothing of dens of vice and crime, in perpetual existence, equally due to the same cause; for it is well known that criminals are mostly drawn from those who have had but little or no instruction in school. These are common truths, but never so patent as in recent years."

Massachusetts laws require that all children between the ages of eight and fourteen years must attend school at least twenty weeks in the year or have equivalent educational advantages, and that children under ten years of age shall not be employed in manufacturing establishments, etc., and those between the ages of ten and fourteen shall not be so employed unless they have had a prescribed amount of schooling and provision be made for them to continue to have certain school privileges. These laws are enforced with heavy penalties. The Superintendent of the Holyoke schools has the following suggestive remarks concerning their enforcement:

While these laws generally increase the school attendance and promote the welfare of the State, in some instances they are terribly burdensome and oppressive, besides making an unjust discrimination against manufacturing places. When parents are unable, on account of poverty, to send their children to school, no penalty is exacted, the child may stay at home to assist in household affairs or may labor upon a farm, or work anywhere except in a manufacturing or mercantile establishment, and still no penalty; but let the same child work during the same time in a mill, and the employers are fined and their names bandied in the public prints. It is certainly as injurious for a child to bend over from sunrise to sunset weeding vegetables as to work ten hours in a cotton mill; and yet the employer in one case is fined and in the other case undisturbed. All employers, including parents who retain children at home to assist about the house, should be treated without distinction; and, if they employ the labor of children who are required to attend school, all should be fined or all exempted.

For the best interests of the State the law ought to include all employers and demand the attendance of all children, provided the families can be supported while the children are at school. This is a phase of the subject which legislation has ignored. What shall be done when the labor of a little child, who earns a paltry $8 or $10 a month, is a bridge between self-support of a family or its lapse into pauperism. "If my child is taken from the mill I must go to the city for support," has again and again been urged; and

half-starved, poorly clad men and women, the tears streaming down their faces, will beg and plead for the privilege of working with their children and retaining their children at work for them in order to escape the degradation of pauperism. Scores of men and women and children bearing unmistakably the pinched aspect of poverty have urged their need in this city, and have been denied the privilege of making the family self-supporting. Children have gone to school without a breakfast or a dinner, some with only one meal a day, barefoot, with insufficient clothing, and the city cannot and the State will not alleviate the suffering. The Board of State Charities should be required to make provision to relieve the distress in such cases, or some one should be authorized to excuse such pupils from school attendance and permit them to contribute to their own support.

This is not published as an argument in opposition to compulsory education, but to show that it is necessary to make the law broader and more comprehensive, and also to provide for the support of those who are unable to gain any advantage from their school on account of the constant suffering occasioned by the gnawings of hunger and lack of all the comforts of life. It is not a slight thing to make paupers of a a family whose members have sufficient self-respect to wish to support themselves; and until the State makes suitable provision for the support of such persons as will obviate this necessity, the evil of constant employment is preferable to the disgrace of pauperism. The assistance to these families should be rendered in such a manner that it will be considered simply an equivalent for the time the pupil devotes to the service of the State and school, rather than to the service of his employer, and not as "poor aid," for a year's instruction in school would not compensate for the injustice of placing persons willing and able to support themselves upon the "pauper list" for a month or even a day.

TWO MONTHS IN EUROPE.

WHAT THREE HUNDRED DOLLARS WILL DO.

ONE of the correspondents of the New York *Tribune*, in London, sends the following communication to that paper outlining a cheap trip to Europe. As some of our readers will visit the Old World during the following summer, they will thank us for republishing the article. Perhaps, too, there may be those who are longing to make the trip, but who have been kept at home on account of the reported expense; to such the information contained in the article will be a source of gratification:

A young college student has recently written to me to obtain an estimate of the least necessary cost of a trip to Europe during the coming summer vacation. The chief obstacle in the way is the supposed necessary expense. "I am not able to afford the luxury of foreign travel," he writes: "if the cost must be even the lowest estimates of the guide books. But might not the journey be made at a cheaper rate? Would it not be practicable, by economizing in every direction, to spend two months in England and France, chiefly in the two capitals, and to bring the entire cost within $300? * * * I am quite prepared to rough it a little for the sake of seeing something of the Old World."

This letter induced me to consider carefully the problem of making such a journey within the cost named, and I have decided that the project is entirely feasible. In these days travel is no longer a luxury which only the rich can afford. With a certain habit of self-denial, in the matter of spending money, a contentment with quiet, thorough and studious visits to a few places of chief and special interest rather than hurried glimpses of many scenes, and a willingness to undergo many minor discomforts conditional to the impecunious state everywhere, but especially in traveling, a young man can spend a summer vacation abroad at an expenditure of very little money. I have drawn up for my friend a programme for a two months' tour, by following which, under conditions stated, he will be able to see some of the principal points of interest in England, to visit Paris and the Exposition, and to accomplish the round trip from New York at an expense of $260. This sum covers his entire traveling and living expenses; but, of course, makes no allowance for gratification of personal tastes in the way of smoking or drinking, or for many little purchases which the most economical traveler is sure to make in London and Paris. As, however, some of the readers of *The Tribune* may wish to know how such a journey may be accomplished, I place the programme, cost, and conditions of success, before them.

AN ITINERARY.

First—As to the programme: Supposing our student to sail from New-York about June 20, he would arrive at Liverpool about the first of July. From there he would guide his footsteps as follows:

July 1. Land in Liverpool. Take first train up to London.
July 2–23. Three weeks in London, with excursions to environs.
July 23. Leave London for Paris, by London, Brighton and S. C. Railroad.
July 24. Arrive in Paris. Spend three weeks there.
August 14. Leave Paris for Rouen and Dieppe.
August 15. Arrive in Brighton. Take lodgings.
August 17. Leave Brighton for Oxford, via London. Take lodgings.
August 20. Oxford to Leamington. Lodgings.
August 21. Excursion to Stratford-upon-Avon.
August 22. Excursion to Coventry. Walk home by way of Kenilworth Castle.
August 23. Visit Warwick Gastle and Guy's Cliff.
August 24. To Birmingham; afternoon to Chester.
August 25. Leave all baggage, but umbrella and shawl-strap, at cloak-room, Chester Railroad Station, and take excursion ticket through North Wales, visiting Conway Castle, Bangor, Beaumnn's Castle (near Bangor in Anglesey), Caernarvon Castle, Llanberris Lake, Mount Snowdon and back to Chester. Time, four or five days.
August 30. To Liverpool.
August 31. Sail for America.

COST OF THE TOUR.

Traveling expenses:

Ocean passage, return ticket, "National," "Anchor" or "State Lines," about	$105 00
Liverpool to London, 3d class	4 50
London to Paris and back (return ticket) 2d class	9 75
London to Liverpool, via Oxford, Leamington, Birmingham, Chester, North Wales, 3d class	10 00
Excursions about London and Paris, say	5 75
Sight-seeing and fees at 50 cents per day	30 00
Board and lodging in England, thirty-seven days at $1.25	47 00
Board and lodging in France, twenty-four days at $2	48 00
Total	$260 00

Now this plan does not profess to be the best possible distribution of time for everybody; I have al-

lowed, however, no more time to London and Paris than will barely suffice for visiting these two chief capitals of Europe. Still, if one does not expect to come abroad again, with $50 more he might profitably extend his tour to Switzerland, and return to London by the Rhine. The modest limits I have marked out are, I think, quite sufficient for a first summer abroad. To confine one's expenses to the figures here given will be by no means an easy task, and the majority even of those who consider themselves extremely economical will probably prefer to spend more money, and, after their own standpoint, to take more comfort. What I wish to demonstrate is that a journey at the cost mentioned is perfectly practicable for those who care to do it: although only so by implicit adherence to the essential conditions of economical travel in Europe.

CONDITIONS OF ECONOMICAL TRAVEL.

1. Keep an exact daily account of every expenditure. Know where every penny goes, and for what.

2. Travel with no baggage but what you can carry in your hand. One shawl-strap arranged to sling over the shoulder, and one small satchel, will contain everything one needs for two months. How a trunk carried over this route will increase the cost of the tour by $25 I have not space to explain, but it will do it.

3. Travel third-class in England. Compartments are on all express trains; are very comfortable, much cheaper, and used by very respectable people. I have known ladies who have traveled alone through England, France and Germany third-class, without the least inconvenience.

4. Never put up at a hotel, even for a single night, without knowing what you are to be charged; and, if to depart early, settle your account the night before. When the economical traveler puts up at a hotel, he inquires the price of the "cheapest beds." That means the top of the house, but his accommodations will be clean and comfortable. Carry a candle in your hand-bag, and avoid paying exorbitantly for those the hotel furnishes. If restaurants are near, you will find it pays to take your meals therein, rather than at the hotel, as prices are often 50 per cent. lower.

5. Patronize hotels, anyway, as little as possible. I have gone from London through North Wales and back again for a vacation trip, stopped at more than a dozen places, made excursions in every direction, without passing a night in a hotel. How? By taking lodgings. It always pays to do this if you are to spend more than two nights in one place. As you pass along the street, you notice a little card in the window with the inscription thereon, "Apartments" (you remember how Mrs. Bardell, in the eloquent words of Sergeant Buzfuz, "dried her tears, clasped her innocent boy to her maternal bosom, and put the bill in her parlor window"). You need, as a single traveller, only a good sized bed room, furnished as a sitting room. You enter and inquire the price. The landlady, with a little hesitation which indicates a mental calculation of the amount over her ordinary rates which she may venture to charge you, names a price per week. Invariably this, to an American, is higher than what she would ask her English lodgers. If the room suits, offer her two shillings per day, inclusive of all extras. That will include cooking and serving of your breakfast and supper; provisions for which she will buy and present a bill therefor, or you may buy them yourself, if you wish to be sure of getting the best. Have it distinctly understood you are to give but one day's notice on leaving. It is needless to say that two persons traveling in company will do far better in this matter of lodgings than the single traveler.

London—Walk from steamer landing in Liverpool, one mile to London and North Western Railway Station, and go up to London direct. Spend first daylight after arrival in securing lodgings. Over Westminster Bridge, up Kensington Road, in neighborhood of Oakden street, and St. Mary's square, one can obtain a comfortably furnished, clean room at from eight to ten shillings per week, service included. Breakfast at home, if you are wise; dine wherever you happen to be; have your supper served when you return home; and your board, including lodging, ought not to reach a dollar a day. Visit Westminster Abbey on Mondays when you can ramble around the tombs, undisturbed by the monotonous chant of the beadle who takes you in charge on other days. Hampton Court is open Sundays—a beautiful excursion. Give a whole day to the British Museum, and go at least one Saturday evening to the South Kensington collection.

6. In Europe nearly everybody who does you a service expects a fee, varying from a penny upwards. An Englishman gives four-pence, where an American tosses a shilling. To avoid necessity for feeing, simply avoid having service thrust upon you; carry your own baggage, and don't allow a railway porter to twist it out of your hands, to carry it a dozen yards. In lodgings you will see that service is included; in hotels a special charge is made for it; and "Boots," whose name indicates his duties, is the only servant who needs to be feed. At lunch or dinner, give the waiters one or two pence in addition to your bill. Remember that service will be offered in many directions to which one is not at all accustomed in America, and you must learn not to accept it, unless you wish to pay for it. This counting the pence to be saved in fees, will seem very trifling to many; but the traveler of limited means would find the sum total of his expenditures, in this direction, by no means a small matter.

7. Walk as much as possible about the town in which you stop. In no other way can one so satisfactorily and thoroughly explore large cities like London and Paris. Of course, for considerable distances, you will take the omnibus, or in London the underground railway, or the Thames steamers; but ordinarily it pays to have a good map and go afoot.

SUGGESTIONS FOR THE TRIP.

I can safely guarantee that, accidents excepted, any one adhering strictly to the above directions, can make the tour I have sketched at the figure named. A few additional suggestions will, however, be found useful.

Money—Take from New York £5 in gold and silver, and balance in draft on London. Of course, a margin for emergencies, above estimated expenses, is advisable.

Guide Books—The "Satchel Guide" (published by Hurd & Houghton) is a very good one for one wishing a general idea of the journey beforehand; but it is well to buy the local guide books for the places visited. At railway stations in England ask for Abel Heywood's penny guides, with maps, for such places as Oxford, Leamington, North Wales, etc. In London buy a six-penny pocket map of the city, which carry with you always, and select any one of numerous shilling guide books. For Paris no other guide book, whatever London booksellers may say, will

compare in usefulness with Baedeker's. Buy it in London before starting.

Paris.—Of course, with the knowledge that during the Exposition room rents will be considerably increased, it is very difficult to state exactly the cost of living in Paris this summer; but I have estimated it at more than double the ordinary cost of living in the Latin Quarter, where I advise the economical traveller to live, since rents there are always cheaper than elsewhere in Paris. I take it for granted that the student traveller possesses at least a smattering of French, which he will find very useful in making his bargain for rooms, etc.; but even if entirely ignorant of the language, he may still very passably succeed this summer, though of course he will pay somewhat for his ignorance. Go at once to the neighborhood of the Luxembourg, and look for a room in any of the streets radiating from the Odeon, or in the region of the Collegé de France. In the latter part of July, the students, who almost exclusively occupy this quarter, will begin to leave Paris, and many rooms will be vacant. A small furnished room ought to be easily procured for 3 or 4 francs per day, every extra included, and restaurant living is not likely to be very much, if at all, higher than usual. If the traveller cannot speak French, he would best stop at a pension where English is spoken; at Pension Leonard, No. 44 Rue de Madame, near the Luxembourg, he can probably make as satisfactory an arrangement as anywhere. It should be remembered—first, that everywhere in Paris this summer the price named will be more than will be taken; and that an offer should always be tendered, when rooms suit; and second, that a perfectly clear and distinct understanding of the terms, etc., should in every case be attained, regarding price, extras, service and number of days' notice required, previous to leaving. If this is overlooked, a difficulty on settling your final accounts may be very confidently expected. A good way to prevent mistakes, is to take rooms or board for only one week; to give notice; require the bill to be rendered, pay in advance, and when time is up, walk off if you can do better elsewhere, or make another bargain for another week, if you like the place.

Rouen.—Leave Paris early in the morning so as to stop over a few hours in Rouen. Visit the Cathedral, the Church of St. Ouen (one of the most beautiful Gothic churches in existence), and the market place where the poor Maid of Orleans was burnt by our ancestors. Dieppe has few attractions, except the sea bathing. Cross the channel by night.

Brighton.—Tickets by this route allow one to break the journey at Brighton, and although a little out of the way, by all means improve the opportunity. Lodgings everywhere numerous; try the hill to the right of the railway station. Visit the aquarium, the finest in the world, at least once in the evening, when tanks are illuminated.

Oxford.—You will arrive during vacation, when students' lodgings are vacant. Try neighborhood of Keble College and north part of the town. Take a row on the river, some quiet evening, and see candidates for next year's boat race in training.

Leamington.—One of Hawthorne's homes, in England. A good point from which to make excursions in various directions: one day to Stratford-on-Avon; another to Coventry and the ruins of Kenilworth; a third to Warwick Castle, etc. The surrounding country is very beautiful and historically interesting.

North Wales.—Leaving Leamington by Great Western Railroad, you can spend an hour or more in Birmingham, and then go to Chester the same afternoon. For the last few days an excursion through North Wales is recommended, at least as far as Mt. Snowdon, visiting places named in the programme. On return, see Chester, and go up to

Liverpool.—As you had best arrive here the day before sailing, abundant time will be at your disposal to see the city quite satisfactorily, before bidding it, and England, farewell.

I have thus endeavored to sketch a two months' tour abroad with every expense and every emergency so carefully indicated that a traveller over the route may make so much of a European visit at a saving of nearly one-half the usual expense. Probably few tourists will care to practise all the money-saving methods here suggested, and not a few, I dare say, will prefer the comforts of home to traveling with the inconveniennces conditional to so strict economy. But I have not written for them, nor in fact for any one who prefers personal ease to educational opportunity. Europe is a school as well as a pleasure ground. If a student really wishes to enjoy some of its advantages; if he has somewhat of the enthusiasm which inspired the author of "Views Afoot;" if he feels that a lunch of bread and cheese, under the shadow of Westminster Abbey, would be better relished than a dinner at Delmonico's; if he is willing to submit to some inconveniences for the sake of incalculable advantage, even if he can spare to the journey only the sum I have named, let him come over this summer. He will never regret it. And I make him welcome to these few hints, based upon several years' experience of an economical traveller.

Directors' Column.

IN an address at the dedication of a town hall at Ayer, Massachusetts, Col. Needham uttered the following strong words in behalf of popular education:

The town house represents popular education. Underlying free speech and the exercise of the ballot, is knowledge. Who can speak well if he has not words? Who can act intelligently if he has not wisdom? Our great system of public instruction owes its support to the edicts of the town house. If measures for the support of public schools are not adopted, the town house belies itself, and the free speech and free ballot which it symbolizes are dead carcases, and the building a whitened sepulchre.

Who knows better than we that "the winds and waves are always on the side of the best navigators?" And what does this signify, except that he who learns the most of the elements, approximates the nearest to being their master?

Said Lord Brougham, "There have been periods when the country heard with dismay that the soldier was abroad. That is not the case now. Let the soldier be ever so much abroad in the present age, he can do nothing. There is another person abroad—a less important person—in the eyes of some an insignificant person—whose labors have tended to produce this state of things; the schoolmaster is abroad; and I trust more to the schoolmaster, armed with his primer, than I do to the soldier, in his full military array, for extending and upholding the liberties of my country."

The public schools hail from the town house; they

originated in the town meeting; and the appropriations for their support can come from no other source. When that fountain ceases to yield a supply, the school-house will be but a monument of departed glory.

Whatever is to be done implies some one to do it. If the people, from a proper interest in public education, lack the capacity, the demagogue will seize the reins and lead the way from democracy to tyranny.

Whoever votes against liberal means for the support of public schools, votes against the theory of the town hall and self-government. Means must be adapted to ends. Ignorance never preserved the liberty of a people or advanced their progress from bondage to freedom. School-houses may not necessarily be evidences of intellectual growth, but the absence of the school-house and schoolmaster will necessitate a more vigilant police and subvert the foundations of democratic institutions.

HOW MUCH TRUTH IN IT?

An enthusiastic writer on the kindergarten instruction, in the October number of *The Galaxy*, has some rather severe strictures upon the present methods of teaching in our common schools and their effects. We present below an extract from the article. How much truth is there in it?

"The question arises, for a thousand children of all classes from each system of education, which has given them the best preparation for earning a living in the world as it is, the present public school system of America or the no-school system? How many has the public school system provided with a living? The answer is very easy. In a thousand boys ten take to teaching other boys, while they are studying law or medicine. Two of these remain teachers all their lives. Fifty go into bookkeepers' places, where ten remain. The rest disperse to business of all kinds, trades and shopkeeping, all of which have to be learned, and in which the school education is of little use, save indirectly and by its general cultivation of the intelligence. Of the thousand girls fifty go to teaching. The rest forget all they ever learned. Of knowledge useful to them as mothers they have acquired nothing; of housekeeping duties less.

"This is the dark side of modern education. There is of course a bright one. Take a hundred workmen, brought up to any given handicraft, especially one requiring intelligence. The men who can read and write, and who have enjoyed the benefits of an English education, are more likely to rise in the world, to improve their position, than those who have never known anything but one routine of work from their earliest years. To become a *skilled* workman, indeed, education is absolutely necessary. The question remains—what sort of education is most likely to help them, one wholly theoretical, or one in which practice and theory are joined? The answer is obvious. It is found in the great and increasing popularity of industrial schools, wherever such have been established by private philanthropy. They are, so far, the only institutions of an educational nature, public or private, with whose benefits no injury has been found to mingle. The only objection to their universal establishments is found in their expense, owing to the vast variety of mechanical employments. These at present render a complete scheme of industrial schools as a national undertaking too difficult for practical adoption. Ideally such a system would be the most perfect national education yet devised. It would at once train the rising generation into useful citizens and true wealth producers. Failing that, let us see what can be done with present systems to attain this desirable end. We find that the common schools tend to produce school teachers, lawyers, doctors, politicians, newspaper men, booksellers, clerks, brokers, and all that class of men who live by their wits. Of artisans, artists, and agriculturists, capable of developing the wealth of a new country, they produce none. These come from outside."

A DIRECTOR ON CERTIFICATES, ETC.

It is a lamentable fact that a large percentage of certificates granted falls into possession of teachers who are little capable of imparting instruction to the young. Be the fault where it may, this works a great harm to the cause of education. There is in every community, a class which is fairly represented in school boards, strong in the "penny wise and pound foolish" line of policy. This is chiefly true of the rural districts. In large towns and cities there is a larger proportion of good material to choose from and therefore they should avoid falling into the same error. When these men come to be school directors, "economy" with them is not to secure the most able teachers but those who will teach for the smallest pittance. It is a very common argument with them to harp on "dull times" to say that work is scarce, and that the laboring man works more hours for his day's work, subject to the inclemency of every outside element, and that his wages at best do not exceed one dollar per day, and are often much less. "For what reason," say they, "shall we pay the teacher more, when he can sit at his ease secure from the cold and stormy blast of our rigorous winters." They never seem to think that there is any difference in the qualifications of teachers. The applicant has a certificate from the County Superintendent, they seem to argue he is all right, and is just as likely to prove a successful teacher as another. It is also a well-known fact that although, as regards numbers, such teachers may be and frequently are quite abundant, yet as regards material, the variety is not so marked. The reason is very apparent. When it is known that the school term of a district is but five months, and the wages but twenty-five dollars per month, how can we expect it to be otherwise? As a rule, in every marketable commodity of our land, superiority will command and receive the best price. Teachers seem to be an exception to this rule. We think it quite a blessing to a rural community for a young man of intelligence to secure a school amongst them, and then to be captivated by one of their fair daughters so that he will settle in their midst, thereby becoming a permanent instructor amongst them. If the certificate were held at a higher standard we would be enabled to secure better teachers for the reason that the poor ones would be enabled to secure the "open sesame" to that branch of industry. We would have to pay higher salaries, but what is worth doing is worth doing well; and what is well done is cheap at a fair remuneration.

I notice in *The School Journal* a great deal said pro and con in regard to our system of County Superintendency. The system is certainly one of very great benefit. It is invaluable, and yet it is not perfect. How is it possible for one man, though he may be an Hercules both mentally and physically, effectually to oversee and conduct perhaps five or six hundred

schools at considerable distances from each other, and only five months' time in the most inclement season of the year in which to accomplish it? What sane mind will consider less than one visit per month, of half a day each, sufficient?

I observe also that there is, by some, a move made to pay the directors a small pittance, and to require them to visit the schools at stated periods. Too many of our directors are incompetent to give instruction to teachers in reference to methods of teaching. Has it ever been taken into consideration how many of our directors there are who are able to stand up and make even a reasonably intelligent address! Instead of dividing a small pittance among directors, we would suggest that the Superintendent be supplied with such assistants that each district in every county will receive the desired benefit. DIRECTOR.

CERTIFICATES OF COMPETENCY.

UNDER certain conditions, the Superintendent of Public Instruction is authorized by law to grant what are called Certificates of Competency to persons who desire to be candidates for the office of County, City or Borough Superintendent. These certificates are in no sense recommendations for the office. They simply mean that the holder is legally qualified to hold the office of Superintendent, not at all that he has the requisite qualifications in other respects. They were designed only to relieve particular individuals from a hardship imposed upon them by the working of the law concerning teachers' certificates, and conventions of directors should consider them only in the light of Professional or Permanent Certificates. In granting them, when the conditions required by the law have been fulfilled, the signature of the Superintendent is simply formal.

EDUCATION AND CRIME.

REV. A. S. FISK, in his report on "The Relation of Education to Crime in New England," summarized these five significant facts:

1. That at least eighty per cent. of the crime in New England is committed by those who have no education, or none sufficient to serve them a valuable purpose in life.

2. That, as through the country so through New England, from eighty to ninety per cent. of criminals have never learned any trade or mastered any skilled labor.

3. That not far from seventy-five per cent. of New England crime is committed by persons of foreign extraction—that is, by persons who were born in other countries, or one or both of whose parents were.

4. That from eighty to ninety per cent. of our criminals connect their causes of crime with intemperance.

5. That according to the unanimous judgment of all officers of juvenile reformatories, ninety-five per cent. of these offenders come from idle, ignorant, vicious, and drunken homes. Almost all children of this class are truant from school at the time of committal; almost all of them have been long in petty vices and crimes; and almost the entire number are the children of ignorant and besotted parents.

The responsibility of the teacher is great, but the responsibility of the parent is greater. The parent can do most—does do most—towards fixing the character of his children, and that responsibility *cannot* be transferred to others. The home comes before the school, and nothing is more needed in this country than well-regulated homes. They are of more importance than the schools, because they determine the character of the schools.

If the preachers throughout the country would lay aside, for one year, all doctrinal and dogmatic subjects, and devote themselves to instructing the people how to rear children, and how to make home what God intended it to be, they would, in our humble opinion, be serving their Heavenly Master in a most acceptable manner. How to influence, how to instruct, how to amuse, how to punish, how to form the habits and characters of children at home, are great unsolved problems, worthy the attention of the ablest philanthropists.—*Indiana School Journal.*

COMMUNICATIONS.

WE have received several short communications from teachers, two of which are inserted below:

DUTY OF TEACHERS—HEALTH.

The sphere of school instruction is not limited to the inculcation of good morals and of the knowledge which may be useful in after life. It should also extend to care for the health of those temporarily in school training. Youth is the spring-time of life, yet youth are very liable to the evils and dangers arising from ignorance and from thoughtlessness. Especially in the winter season should teachers bear in mind their opportunity and their responsibility in the matter of health. Those who are careful and thoughtful may save much sorrow by timely attention to this duty. In this article I do not attempt to convey much *instruction*, but I do hope to draw some *attention* to the matter.

Teachers as well as parents should constantly bear in mind the necessity of keeping the feet dry and warm; of sufficient clothing for the whole body; of ventilating rooms without direct exposure to drafts or currents of air; and of equal circulation of warmth through the body, and through every room where human beings sit or sleep.

Diphtheria and other diseases of the throat are most common in this season, and their ravages are indeed fearful. Whatever may be their remote cause, it is a common opinion that at last they become a fungous growth, like a living plant attached to the affected parts. To kill or to remove that fungus, many ways are commended. Gargles of sulphur, of salt and other remedies are among them. Sulphur is a powerful agent, and salt is a universal purifier. For years past, when I have had any irritation of the throat, I have taken chlorate of potassium about the size of a pea, and kept it under the upper lip, letting it dissolve and pass down the throat, and always found it cooling and healing in its effects.

Breathing should always be accomplished with the mouth closed. Whenever the nose is so "stopped" that a child or adult cannot "breathe through it," cold water, sometimes impregnated with salt or other purifying agent, may be "snuffed up" until relief is experienced.

But I must not enlarge. These two points are offered from my own experience, and I hope they may excite an active interest, which, if exercised wisely and in time, may often prove beneficial. T.

TEACHING THE ALPHABET.

Mr. Editor: Having read an interesting article in a late issue entitled "Methods of Teaching the Alphabet," I consider myself one of those whom you request to communicate their methods to THE JOURNAL; and accordingly I offer one of the various methods which I have found it necessary to devise in teaching different children this highly important subject. I trust it may be as useful to some fellow-teacher as it has been to me.

Dividing my class into two divisions I select some letter—perhaps S—and say to the first division that I want them to learn this letter and remember it until after recess—am always definite as to time—and remark to second division that I wish then to pay close attention and, if first division forget their letter, second division may tell them what it is. I then require first division to repeat the name of the letter after me until it is quite familiar and is pronounced correctly by each pupil, after which I ask, "How many can show the letter to me!" They signify by raising right hand. Giving a pointer to some one, I allow him to point to the letter and name it. Another letter is then selected for second division—directing first division to pay attention and proceed in same manner as with first letter. I then print both letters on the board, dismiss the class, and require all to print them several times on their slates from the board. At the next lesson this one is thoroughly reviewed before giving anything new.

I have generally found that the scholars of each division will learn the letter given to them and also that given to the other division much more readily than if two letters were given to the whole class in the same manner. By having them recite in this manner four times each day, ordinary scholars will learn the entire alphabet in a few days.

I have tried many methods and think that I have been most successful with that indicated; yet I do not confine myself exclusively to it, but use other methods frequently to relieve monotony. E. H.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, APRIL, 1878.

To the President of the Triennial Convention of School Directors:

SIR:—The following statement gives the approximate salaries of County Superintendents, as fixed by an act of Assembly, approved April —, 1878. Under the provisions of the act referred to, the Superintendent receives $4.50 for each school under his jurisdiction at the time of his election, providing that in no instance shall his salary be less than $800, nor more than $2000; and in counties containing one hundred schools and upwards, his salary shall not be less than $1000; providing further, that in counties having two hundred and ninety schools, twelve hundred square miles of territory, or an average annual school term of seven and a-half months, the salary shall not be less than $1500.

The bill further provides that Conventions of School Directors, when assembled for the purpose of electing a County Superintendent, may VOTE him a salary greater than the amount he would receive by the act above referred to, such increase to be taken from the *school fund of said county.*

This act, of course, relieves the Conventions of School Directors from the duty of fixing the salaries of Superintendents, as heretofore. Their only duty now consists in electing the best man whose services can be found for the sum named.

J. P. WICKERSHAM,
Supt. Public Instruction.

COUNTIES.	No. of Schools.	Length of Term.	No. Square Miles.....	Approximated Salaries.....
Adams.....	164	5.49	531	$1,000 00
Allegheny.....	390	8.05	757	1,755 00
Armstrong.....	262	5.21	612	1,179 00
Beaver.....	193	6.05	452	1,000 00
Bedford	226	5.09	1,003	1,017 00
Berks.....	433	6.03	900	1;949 50
Blair.....	151	6.54	510	1,000 00
Bradford.....	400	6.12	1,162	1,800 00
Bucks.....	282	7.70	595	1,500 00
Butler.....	246	5.65	814	1,107 00
Cambria.....	215	5.80	666	1,000 00
Cameron.....	37	5.78	381	800 00
Carbon.....	135	6.90	402	1,000 00
Centre.....	213	5.18	1,227	1,500 00
Chester.....	357	8.01	763	1 607 00
Clarion.....	208	5.31	572	1;000 00
Clearfield.....	208	5.37	1,130	1,000 00
Clinton.....	115	5.64	857	1,000 00
Columbia.....	189	5.73	479	1,000 00
Crawford	378	6.31	1 ,005	1,701 00
Cumberland.....	211	6.63	554	1 000 00
Dauphin.....	216	6.75	523	1,000 00
Delaware.....	114	9.40	195	1,500 00
Elk.....	64	6.71	774	800 00
Erie.....	300	7.18	772	1,500 00
Fayette.....	247	5.48	830	1,112 00
Forest.....	46	6.01	431	800 00
Franklin.....	256	5.82	756	1,152 00
Fulton.....	71	5.	442	800 00
Greene.....	186	5.12	620	1,000 00
Huntingdon.....	218	5.34	899	1,000 00
Indiana.....	240	5.48	828	1,080 00
Jefferson.....	166	5.45	646	1,000 00

Juniata	105	5.22	407	1,000 00
Lancaster	535	6.86	973	2,000 00
Lawrence	137	6.50	376	1,000 00
Lebanon	156	6.32	356	1,000 00
Lehigh	238	6.08	364	1,071 00
Luzerne	608	8.14	1,350	2,000 00
Lycoming	232	5.82	1,213	1,500 00
M'Kean	101	6.09	1,007	1,000 00
Mercer	299	6.80	666	1,500 00
Mifflin	104	5.61	377	1,000 00
Monroe	130	5.09	595	1,000 00
Montgomery	294	7.85	484	1,500 00
Montour	73	5.14	140	800 00
Northampton	244	6.81	382	1,098 05
Northumberland	235	6.01	462	1,058 00
Perry	181	5.13	476	1,000 00
Pike	57	5.58	631	800 00
Potter	130	5.77	1,071	1,000 00
Schuylkill	436	8.04	840	1,962 00
Snyder	106	5.33	317	1,000 00
Somerset	226	5.	1,102	1,017 00
Sullivan	61	5.20	434	800 00
Susquehanna	293	6.10	828	1,500 00
Tioga	287	6.32	1,124	1,292 00
Union	87	6.17	315	800 00
Venango	252	6.78	658	1,136 00
Warren	190	6.21	914	1,000 00
Washington	296	5.79	889	1,500 00
Wayne	205	5.82	747	1,000 00
Westmoreland	364	5.47	1,046	1,638 00
Wyoming	108	6.76	403	1,000 00
York	368	5.47	921	1,656 00

PUBLISHING ACCOUNTS OF SCHOOL BOARDS.

THE special attention of School Boards is called to the laws given in full below, in reference to publishing their accounts. It will be noticed that heavy penalties are imposed for neglect of duty in this particular.

I. It shall be the duty of the board of directors to publish an annual statement of the amount of moneys received and expended, and the amount due from collectors, and setting forth all the financial operations of the district, in not less than ten written or printed hand-bills, to be put up in the most public places in the district.

II. That it shall be the duty of each board of school directors, in the several school districts of this Commonwealth, annually, at the close of the school year, to place in the hands of the proper auditors a full certified statement, itemized, of their receipts and expenditures for the past year, including the assets and liabilities of the district of all kinds, with all books, papers and vouchers relating to the same, to be by said auditors examined, and if found to be correct approved; such statement to be spread upon the minutes of the board of directors, and in a condensed but fully classified form published by said board in not less than ten written or printed hand-bills to be put up in the most public places in the district, or if deemed preferable, in the two newspapers of the county in which the district is situated, having the largest circulation among the citizens interested; and for any neglect or failure to perform the duties enjoined by this act, the officers named therein shall be considered guilty of a misdemeanor, punishable by a fine not exing three hundred dollars, to be paid into the school fund of the district in which the offence shall have been committed.

III. That the publication of the accounts of school boards herein provided for shall be in lieu of all other publication of said accounts now required by law; and all acts or parts of acts inconsistent herewith be and they are hereby repealed: *Provided*, That the provisions of this act shall not extend to cities of the first class.

PERMANENT CERTIFICATES GRANTED.

NO.	NAME.	RESIDENCE.
2076	J. H. Boughter..	Fredericksb'g, Lebanon co., Pa.
2077	Joseph E. Leibig	Cornwall, Lebanon co., "
2078	H. S. Gockley..	Myerstown, " "
2079	T. J. Miller....	Ono, " "
2080	C. Batdorf.....	Union Forge, " "
2081	G. W. Pearsall .	Shannon Centre, Potter co., "
2082	G. W. Twitmyer	McElhattan, Clinton co., "
2083	Mary F. Flint..	Portland, Northampton co., "
2084	Miss C. Nichol .	Remington, Allegheny co., "
2085	Wm. C. Smith..	Rockdale Mills, Jefferson co., "
2086	Miss M.J.Shields	Delmont, Westmoreland co., "
2087	Miss M.D.White	Latrobe, " "
2088	H. M. Peebles..	Pleasant Unity, " "
2089	Geo. H. Hugus.	Delmont, " "
2090	S. K. Henrie...	Greensburg, " "
2091	John W. Bright.	McElhattan Clinton co., "
2092	Jasper Card....	Roulette, Potter co., "
2093	L. Purviance...	Connoquenessing, Butler co., "
2094	M. J. Anderson.	Glade Mills, " "
2095	H. Kallenbaugh	Bellevue, Allegheny co., "
2096	Geo. A. Spindler	Beallsville, Washington co., "
2097	S. H. Danshee.	McKeesport, Allegheny co., "
2098	A. M. Ziegler..	East Sandy, Venango co., "
2099	Miss S. Powers.	Monongahela City, Wash. co., "
2100	E. A. Thompson	Towanda, Bradford co., "
2101	L. H. Durling..	Pittsburgh, Allegheny co., "
2102	Miss C. E. Hull.	South Oil City, Venango co., "
2103	D. W. Patterson	Patterson's Mills, Wash. co., "
2104	J. M. Patterson.	" " " "
2105	N. D. Smith ...	Conyngham, Luzerne co., "
2106	RobertStevenson	Burgettstown, Wash. co., "
2107	R. H. Jackson..	Florence, " "
2108	R. W. Dawson.	Beallsville, " "
2109	J. C. Garrard...	Mapleton, Greene co., "
2110	N. McMahon...	Bruin, Butler co., "
2111	W. Z. Matthews	Noblestown, Allegheny co., "
2112	John J. Duffy...	Plains, Luzerne co., "
2113	Ella J. Perkins.	Pittston, " "
2114	Miss E. Simmons	Cross Creek Vil., Wash. co., "
2115	W. W. Dickey .	Brownsdale, Butler co., "
2116	G. W. Weaver..	Dubois, Clearfield co., "
2117	W. G. Russell..	Foxburg, Clarion co., "
2118	M.J.Chamberl'in	Plainsville, Luzerne co., "
2119	J. A. Brandon..	Connoquenessing, Butler co., "
2120	P. J. White	Archibald, Luzerne co., "
2121	Miss T. S. Booz.	Bristol, Bucks co , "
2122	R. E. Downing..	Fillmore, Centre co., "
2123	J. B. Mahon ...	Plains, Luzerne co., "
2124	Thad. M. Conniff	" " "
2125	Miss A. Morton.	Mansfield, Allegheny co., "
2126	Jas. L. Harrison	Pittsburgh, " "
2127	Miss A. J. Herr.	Mifflinsburg, Union co., "
2128	C. J. Potts.....	New Paris, Bedford co., "
2129	W. R. Vaughan	Schellsburg, " "
2130	Miss B. Irving..	Bedford, " "
2131	Miss Zora Mower	" " "
2132	Mrs. K. Donahoe	" " "
2133	Frank Oster....	St. Clairsville, " "

THE LIFE OF EMOTION.—It is the life of emotion which music seizes upon and makes objective. We see the character of a nation's heart in its music as we see the character of its poetry. Italian music is sentimental and superficial; it often sacrifices simplicity to beautiful, to delicate, or to crashing effect: it is intense rather than passionate. French music is sensational and flippant. German music simple, direct, and earnest. We are of course dealing only with the type in every case; no such sweeping criticism can be of universal application. There is one class of music to which these remarks do not apply. In the words of the author of "Music and Morals," "The music of patriotic times and national anthems is always earnest and dignified. In the Marseillaise there is an almost sombre severity, wholly unlike the frivolous, superficial grace and sentimental pathos of the ordinary French school. The men who sing it are not playing at war like fools, nor are they mere children, delighted in its outward pomp and circumstance. They trudge on, footsore and weary, knowing all the horror and the pain that is in store for them, and still willing to conquer and to die. That is the spirit of the Marseillaise, and in it, as in Garibaldi's Hymn, the seriousness of the crisis had called forth the finest qualities of both the French and Italian characters, and banished for a time what is languishing in the one and frivolous in the other." Poetry, painting, and sculpture reach the emotions indirectly through the intellect. Music reaches them directly, and we should therefore rightly expect to find something in common between the two. We do, in fact, see in both those qualities which would make it possible for the one to be the expression of the other: elation and depression which can be expressed musically by a high or low pitch; intensity and variety, expressed by means of the touch and slight modifications of tune by the player, and change of key by the composer.—*Mrs. Herrick.*

LONG, LONG AGO.

CARL MATZ *arr.*

1. Tell me the tales that to me were so dear, Long, long a - go, Long, long a - go;
2. Do you re-mem- ber the path where we met, Long, long a - go, Long, long a - go?
3. Though by your kindness my fond hopes were raised, Long, long ago, Long, long a - go;

Sing me the songs I de - light - ed to hear, Long, long a - go, long a - go.
Ah, yes, you told me you ne'er would forget, Long, long a - go, long a - go.
You, by more el - o-quent lips have been praised, Long, long a - go, long a - go.

Now you are come, all my grief is removed, Let me for- get that so long you have roved,
Then, to all oth - ers my smile you preferr'd, Love, when you spoke, gave a charm to each word,
But by long absence your truth has been tried, Still to your ac-cents I lis - ten with pride,

Let me believe that you love as you loved, Long, long a - go, long a - go.
Still my heart treasures the prais - es I heard, Long, long a - go, long a - go.
Blest as I was when I sat by your side, Long, long a - go, long a - go.

THE
SCHOOL JOURNAL
ORGAN OF THE DEPARTMENT OF COMMON SCHOOLS AND OF THE STATE TEACHERS' ASSOCIATION.

Vol. 26. JUNE, 1878. No. 12.

HIGHER SECONDARY EDUCATION IN SCOTLAND.

PEDAGOGICS ABROAD.—NO. IX.

AMIDST much activity, and not a little wrangling, the primary education of Scotland has been reorganized and extended. Whatever may be thought of the educational policy of the late Government, its practical result will be to multiply primary schools in proportion to the wants of the population. These schools, moreover, will be distinguished whether advantageously or not, by uniformity of character and of management. The schools will be everywhere diffused, and the firm and wise operation of the compulsory clause will gradually sweep within them the whole of the youthful population. In short, an adequate elementary school system is established, or in process of being established, throughout the length and breadth of Scotland.

But the very completeness with which this result is being accomplished, has only brought into clearer light the difficulties with which our higher or secondary instruction is struggling. The old parochial education was of a mixed character. It embraced secondary no less than primary subjects—mathematics, Latin, and sometimes Greek, no less than reading, writing, and arithmetic. The Scotch "dominie" of a former generation was frequently a quaint and impracticable type of human creature, with no knowledge of, and no concern for, methods or standards, and no dreams of a time-table; but he was also commonly a man who had been a session or two at college, and who had brought away from the *alma mater*, to which he never failed to look back with some degree of pride and reverence, reminiscences of higher studies. In addition to the more ordinary work of the school, there was also the master's special class of boys, sometimes with a more than usually bright girl or two mingled with them, who were busy with Cæsar, or Ovid, or Virgil, or the Greek Testament, or Xenophon, or Homer, or to whom the propositions in the first books of Euclid were sufficiently familiar. These were the classes in the parish school from which the Scotch universities drew their pupils; and even to this day the number of first-year students who find their way directly from the parish schools to the universities is about a half of the whole number, for while forty-two per cent of students come from the burgh and middle-class schools, the rest come from the parochial and other elementary schools, or from abroad.

But this old characteristic of Scotch education is rapidly disappearing. In large districts of the country, where it never probably had the hold that it always had in certain northern counties, it is already effaced. A Latin, Greek, or mathematical class is no more to be found in any save a few exceptional parish schools; and even were there boys willing to go on to these higher subjects, the teacher is in many cases unwilling or incompetent to take them on. He is not himself a university man. If he has had a little Latin or mathe-

matics at the Normal Training College, from which the great bulk of teachers are now directly drafted, he has either forgotten them, or has no time to devote himself to them amidst the exigencies of the modern educational system, which has not only him, but all the primary teachers of the country, in its grip. The whole tendency of the system is to concentrate the energies of the school-master upon what have been called the three R's, and so to drill the large mass of pupils in the lower standards that they shall pass the inspector's examination, and bring in the full Government allowance to the school.

It is matter of evidence to which the records of the Education Department of the Privy Council bear witness, that the primary education of Scotland was by no means such as it ought to have been under the old system. And, indeed, it may be doubted how far primary and secondary education can ever go advantageously hand in hand under a single master. In any case, the change which has overtaken the parochial system of Scotch education was an inevitable change, which it is needless to lament. The growth of the new Privy Council system, with its standards, its routine of inspection, and its payment by results, necessarily supplanted the old system, The primary school has enough to do with its own work, and the puhlic school teachers, for the most part, are fitted for this work and for no other.

In such circumstances it is not to be wondered at that grave anxiety has arisen in the country on the subject of secondary education. Where is secondary education henceforth to be got? Imperfect as the old plan may have been, which mixed up primary and secondary subjects together, and so hardly did adequate justice to either, it always at least provided a chance to the clever boy in the country, no less than in the town, to get some preparatory instruction to fit him for the university. But where is this instruction now to be got? How is the higher education of the universities and the work of the schools to be brought into contact? They have never been well adjusted, as everybody who knows Scotland knows sufficiently well. The universities have been forced to descend below their true function, and do a great deal of work which would have been much better done in the school. The state of their junior classes has been long a reproach to the Scottish universities; and nothing that has been said in their defence, however it may excuse them in the exceptional circumstances of the country, can take away the merited reproach. But as things now are, the scholastic preparation so urgently required for the universities, instead of being better, is likely to be worse provided than before. In the larger towns there are a few excellent secondary schools well equipped and efficiently taught. The late Education Act has scheduled eleven burgh schools as higher class public schools, "in which the education does not consist chiefly of elementary instruction." There are, besides, various academies or "colleges" enumerated in the Third Report of the Endowed Schools Commission which, for the want of a better designation, may be classed in the widest sense of the term, "as secondary schools." But even if these institutions were more numerous, they are inadequate to the wants of the country. They are, moreover, without organization or arrangement. Some are merely primary schools in disguise; some are without any endowment whatever; and others have only such fragments of endowment as leave them practically dependent on their pupils. In short, they are insufficient alike in number, distribution, method, and means of efficiency.

It has been well pointed out that the original ideal of Scottish education, as sketched by the reformers in the sixteenth century, contemplated a system of gradual advance from the elementary schools to the universities. The foundations of a comprehensive educational policy were laid in the parish schools, and the national universities were fitted to complete the design; but the intermediate structure, without which the edifice remains incomplete and comparatively a failure, has never been supplied. It is not too much to say, in the language of the recent Report of the Endowed Schools Commission, that "secondary schools, in the proper sense of the term—that is, schools which begin the instruction of their pupils where the elementary schools end, prepare them for the higher class of Civil Service appointments, and for the universities—can scarcely be said to have any place in the educational economy of Scotland.

This has not only been a definite detriment to the country, but has injured those two portions of the educational plan which have been carried out. The elementary schools have been compelled to do more than falls within their province, and the universities, on the other hand, have been unable to do all that properly belongs belongs to them. Students insufficiently taught at the lower stage have been inadequately equipped for the higher. The elementary school-master has had too much to do, and the professor has been obliged

to descend from his chair to the schoolmaster's desk, and labor with his junior students at the Greek and even the Latin rudiments, to the injury at once of his dignity and the intellectual and scholarly growth both of himself and of his higher pupils.

The Education Act has done nothing to meet the chief difficulty of secondary education in Scotland. These schools are all impoverished more or less, and the Act has done nothing to provide them with funds.

The real question, therefore, for the secondary education in Scotland, is a question of money: Where are the funds to be got to reorganize such remains as there are of a secondary school system, and to provide as many secondary schools as are necessary for the country? The elementary system is a rate-supported system. In so far as funds are not otherwise available for the maintenance of elementary schools, the rates of each parish are available for this purpose. But the secondary schools are practically debarred all use of the rates, save to pay for their annual examination. Elementary education is recognized as a fair public charge, but the higher education is supposed to be able to take care of itself. Education, up to a certain point, is a State concern. Beyond this point it is supposed to be a private concern.

It is, no doubt, a primary duty of the State to provide elementary education for all citizens, to take care that no portion of the population shall be allowed to grow up in ignorance. But even on the popular principles which regulate so much of our modern legislation, it by no means follows that Government should confine its support to elementary schools. On the contrary, these principles carried out appear to us to lead to a quite different result. The fallacy lying at the basis of the prevailing idea, that elementary schooling is the people's business and therefore to be provided by the State, while the higher education is only the concern of the rich, and may therefore be left for its provision to the rich, deserves a few words.

Once admit the principle of State support for primary schools, and *a fortiori* the principle is good for secondary schools. If the people have any right to be provided with the one class of schools, they have a still greater right to be provided with the other. For secondary schools can never flourish without some external aid. The principle of supply and demand fails immediately we get above rudimentary wants in education, or anything else. It is not the mass, but only selections from it everywhere, that need secondary instruction; and a need so thinly diffused can never call forth adequate means of supply. It is all the more the duty of the State, therefore, on the popular principle of providing a fair field for every citizen to rise to his natural level, to bring higher instruction within the reach of all able to avail themselves of it. Only in this way can the poorer citizen ever reach it. Secondary schools, with the means of transmitting the cleverer boys and girls on to them from the lower schools, are a special boon to *the people*.

Rightly viewed, however, all class distinctions are really inapplicable to the subject. If education is to be a State concern at all, there is no good reason why the higher as well as the lower education should not receive State support. All classes are interested in the one no less than the other, and derive benefit from the one equally with the other. The true idea of a State system of education is one which contemplates all classes, and provides the means of an adequate education for the youth of all classes according to their abilities and prospects. If education is a public business, it is one which should be thoroughly and completely done, and funds which are drawn from all classes alike should be applied in some fair proportion to the institution or encouragement of schools suited to all, and by which all may profit.

We are brought back, then, to the question of the best means of aiding the higher education in Scotland. The first means, let us say at once, appears to us, if not direct Government assistance, yet certainly Government initiative. Supposing, as we believe, that there are resources otherwise which might be made available for the purpose, it is necessary to start with some authority for ascertaining in the first instance all the facts of the case—how far, for example, new centres of secondary instruction are required, and what are the best localities for such centres. The field of primary education is adequately mapped out. The parochial and burghal divisions of the country form its natural areas, and schools have simply to be planted in these areas in such proportion and in such special localities as they are needed. But the extent to which secondary schools are really required, and their appropriate distribution, form a problem of much greater difficulty, as to which it cannot be said that we have as yet full or accurate information. The information can only be got by some competent authority.

A further very important question occurs in immediate connection with the subject. What is the present amount of the secondary

instruction given in the junior classes of the universities? It is impossible that this education can be put on a satisfactory footing without a thorough readjustment of its relations to the teaching of the universities. So long as this teaching is allowed to adapt itself to all stages of preparation in Latin, Greek and mathematics, and even in some cases allowed to take up the instruction of these subjects from the beginning, secondary schools will be placed at a disadvantage which they have no right to encounter. For the laxer discipline and freedom of the universities will always prove an attraction to a certain class of youths; and even their parents are tempted by the idea of combining university and secondary instruction, and passing their sons, as it is said, through college, instead of leaving them in the hands of the schoolmaster. This evil habit has become so inveterate in Scotland that it can only be arrested, it is feared, by very stringent measures—by, in short, shutting the university door in the face of all who have not reached a definite measure of attainment in these subjects.

But some public authority is not only necessary to institute a course of inquiry into the actual need of secondary education and its best local distribution, but also to deal with such funds, from whatever source, as may be made applicable to secondary instruction throughout the country.

The main result of our remarks is to demonstrate the necessity of some educational authority for deliberately and effectually dealing with the still unsolved problem of secondary education in Scotland. Even should no public money in the shape of taxes or rates or grants be given for the institution and maintenance of secondary schools, it seems absolutely necessary that the subject should be dealt with on public grounds and by some public authority, with power to make adequate inquiry, and to apply in the best manner such funds as are at this moment truly applicable to the object.

If it is absolutely necessary to have recourse to some direct supply of public money for the support of our secondary schools, we confess to a preference for a rate-support rather than any other. It is, upon the whole, the least liable to abuse. A very slight increment, which, of course, would only be laid on the richer districts or towns, would meet the whole exigency of the demand. Even as the Education Act at present stands, the secondary schools are partly rate-supported. Higher class schools may be built or enlarged from the rates, and the cost of the annual examination is defrayed, as we have seen, from the same source. There would therefore be no introduction of a new principle, even if rates were made available for the direct support of these schools. *Blackwood's Magazine.*

BIDE A WEE, AND DINNA FRET.

Is the road very dreary?
Patience yet!
Rest will be sweeter, if thou art aweary
And after night cometh the morning cheery,
Then bide a wee, and dinna fret.

The clouds have silver lining,
Don't forget!
And though he's hidden, still the sun is shining;
Courage! instead of tears in vain repining,
Just bide a wee and dinna fret.

With toil and cares unbending
Art beset?
Bethink thee how the storms from heaven descending
Snap the stiff oak, but spare the willow bending,
And bide a wee, and dinna fret.

Grief sharper sting doth borrow
From regret!
But yesterday is gone, and shall its sorrow
Unfit us for the present and the morrow?
Nay; bide a wee, and dinna fret.

An over-anxious brooding
Doth beget
A host of fears and phantasies deluding;
Then, brother, lest the torments be intruding,
Just bide a wee and dinna fret.

Leisure Hours.

HINTS ABOUT LETTER-WRITING.

READ THIS TO YOUR SCHOOL.

OUR letter-writing is very much a matter of habit, and for that reason it is important that young people should learn early to consider it a pleasant way of communicating thoughts and feelings to their friends, instead of a burdensome task to be got over as quickly as possible.

We often hear people excuse themselves by saying that they have no "gift for writing letters," as though it were something like an ear for music, only accorded to a favored few. But the truth is that any one can write interesting and pleasant letters who will take a little trouble and really persevere in the effort. The grand difficulty in the way is that they are too selfish and too indolent to try. Nothing that is worth anything comes without effort, and if you do not care enough about gratifying your friends to take a little pains for it, you deserve never to receive any letters yourselves.

A few simple rules carefully observed, will help you over some of the things which you call difficulties. In the first place, *always write distinctly*. It destroys much of the pleasure in receiving a letter if it cannot be read without puzzling over every word. Many an epistle, written on heavy cream-laid paper, with a monogram at the top, is only an annoyance to the one to whom it is addressed, on account of pale ink and careless handwriting.

Be particular in the matter of dating, giving every item distinctly, and sign the letter with your full name. If this habit is formed, you will not run the risk of losing valuable letters, which cannot be forwarded from the Dead-Letter Office, unless accompanied with the full address.

You will find it more easy to reply to a letter soon after you get it than if you neglect it for a few weeks, because you will have the impressions which the first reading made upon your mind. Tell your friend when you received the letter which you are answering, and take up the topics in the order in which they naturally come, remembering to answer all the questions which have been asked. Try to think what your friend would like best to hear about, and when you undertake to tell anything, do not leave it half told, but finish the story. People who are not careful about this, often give a false impression without meaning to do so. For instance, one of these careless writers, in giving an account of a fire, simply stated that the house was burned, without giving any qualifications, thus giving the impression that it was entirely consumed, thereby causing a whole family much unnecessary trouble and anxiety, as the actual burning in question was very slight.

Do not consider anything too trivial to write about which you would think worth mentioning in conversation. Writing letters is simply talking upon paper, and your friends will be much more entertained by the narration of little every-day affairs, than by profound observations upon topics which you care nothing about.

In writing to very intimate friends, who will be interested in the details of your daily life, it is well sometimes to make your letter a sort of diary—telling something of how you have spent each day since you wrote last; what books you have been reading, what letters you have received from mutual friends, and what you have heard or seen which has interested you.

Write all that you have to say on one subject at once. That is, do not begin to tell about your garden, and then about your school, and then about your garden again; but finish one subject before you begin another. Do not be afraid of using the pronoun *I*. Some people avoid it and thus give their sentences a shabby and unfinished sound, as "Went to Boston—called on Mrs. Smith." Never apologize for what you write, by saying that you do not like to write letters. You would not think it quite polite, in visiting a friend, to say, "I do not like to talk to you, so I shall not say much." Keep the idea before you that you are writing for the sake of giving pleasure to your friend.

When your letter is merely an inquiry, or on a matter of business, the case is different. You then should try to be as brief, concise, and clear as possible. An elaborately drawn out business letter is as out of place as it is inconsiderate.

"Do not think what to write; write what you think," is an old rule, and a good one to remember. If you are away from home, it is very selfish not to share your good times with the family by writing frequent letters. You can tell what you are enjoying so much better while it is fresh in your mind, than you can after your return, when you may not have leisure to go over the whole ground; and these home letters may be a means afterwards of refreshing your own memory, and reminding you of incidents which you would otherwise have forgotten. There are many other things which might be said here, but this will do for the present. A very good rule for letter writing is the golden one, "Do as you would be done by."—*Susan A. Brown, in St. Nicholas.*

PET'S COMPOSITION.

HELEN MATTIERS.

WHAT'S the matter, Pet?"

"Oh! Aunty, to-morrow is composition-day and I can't think of anything to write."

"Let me see what you have on your slate."

"Oh! Aunt Kate, I'm ashamed, it is so stupid. But you may read it if you like."

Aunt Kate glanced over the slate that Pet held up for her inspection, and then stooped and kissed the tear-stained face of the young "composer."

"Oh! yes, I see. Trying to make bricks without straw. Put up your slate now, dear, and come with me for a walk."

Aunt Kate was all ready to go out, with a basket on her arm, and Pet's scarlet cloak in her hands. The cape was soon wrapped around Pet's plump shoulders and her hood drawn over her curly head, and they were off in a jiffy, for Aunt Kate is one of those brisk people who are never long a-doing, and who stir up lazy folks as you have seen the wind whisk dry leaves about.

"Where are we going, Auntie?" asked Pet, as she shut the cottage gate behind them.

"To the woods for wild flowers."

"Oh! how nice!" and Pet gave a little scream of delight, and with a skip, hop, and a jump, was off down the grassy lane. At the end of the lane there was a stile, and when you crossed that you were in the woods. Here Pet sat perched like a red-bird on the topmost step, when Aunt Kate came up.

"Well, Red Riding Hood, have you seen the wolf to-day?"

"No, but I was afraid I might, so I waited for you. But I've seen two blue-birds and a crow, and oh! the cunningest little squirrel! He ran up that beech tree and hopped into a hole, as quick as a flash."

By this time Pet had jumped off the stile and was scuffling among the dead leaves, making them crackle and fly about like mad.

"This way, dear, I always find the first flowers on this southern slope. Next month this bank will be ablaze with Indian pinks. Columbines grow higher up on that rocky ledge, but it is too soon for them yet."

"Oh! Auntie, come quick, before I touch them. The lovely little things! See how they are cuddled up together, to keep warm. What are they?"

"That is a very fine cluster of *Hepatica triloba*, commonly called liverwort. In some parts of the country, I believe children call them squirrel-cups."

"They do look like cups when half open. What a pretty color they are—such a bright blue they almost sparkle. What are you doing, Auntie?"

"I am going to fasten this bit of white paper to a stick and leave it here, so that we can find it when we come back."

"Oh! how funny! That is like the discoverers used to do when they found a new country. They always planted a flag the first thing. Here are some more just like those; only they are white. How close they cling to the knots of this tree, as if they were afraid and wanted the tree to take care of them. Are there any more sorts besides blue and white?"

"Yes, some are of a pale rose color, and there are several varieties of blue."

"How odd the leaves look—so brown and battered, as if they had been out in all the storms of last winter."

"And so they have. After the blossoms have passed away the new leaves come, and they are quite pretty. Many of them are variegated."

"What beautiful ferns! Are they evergreen, too?"

"Yes; these large ferns all grew last year. But here are a few tiny new ones just coming up." And Aunt Kate put down her basket and took out a trowel and began to dig up some of the finest of the ferns, taking care to disturb the roots as little as possible. While she was thus engaged, Pet's scarlet cloak flitted hither and thither among the leafless trees, quite lighting up the sombre woods with its brilliant coloring. Presently Aunt Kate called to Pet that it was time to go home. The little girl came running up, with her hands full of flowers, and her cheeks as red as her cloak, and her blue eyes sparkling.

"What a lovely little wood-nymph it is," thought Aunt Kate. "Quite an improvement on the heavy-eyed, white-cheeked slave of the slate."

"I have found some violets, and some other flowers that look like the white liverworts; but they are more delicate and have new leaves."

"These are wood anemones. They are dainty little things."

"Do you know, Aunty, they make me think of Cousin Alice. They are so fair and tender."

"And these sturdy hepaticas are like Alice's little country cousin, are they not? But here are the white flag and my blue beauties quite safe." While Aunt Kate took up the hepaticas, Pet hunted for partridge-berries among the moss under a clump of pines close at hand. Just as Aunt Kate was ready to start, Pet called out:

"Don't you smell something good, Aunty—something spicy and fresh and woody? Oh! I've found it! Its a teenty-weenty flower, pink and white, and looks like wax; and it grows close to the ground, under the leaves. Oh! how sweet!"

"That is the celebrated May-flower, or trailing arbutus. We are lucky to find it, for it is rare in these woods."

"Oh! Aunty, your basket does look too sweet! Let me put in my May-flowers, then it will smell sweet too."

I wish a painter could have seen Aunt Kate's basket after Pet added her rose-colored May-flowers and bright berries to its store of woodland treasures.

It would have made a lovely picture, with its fringe of graceful ferns, its dainty wild-flowers, and exquisite lichens, of all the delicate wood tints. They heard the tea-bell ring as they entered the cottage gate; and Pet said she was as hungry as the wolf that eat Red Riding Hood. After tea, Aunt Kate asked Pet to come to her room. Aunt Kate's room was the cosiest place imaginable, and Pet was always glad of an invitation to visit it. This evening a cheery fire burned in the open grate, and a lighted lamp, with a pretty green shade, stood on the table. Aunt Kate's easy chair was drawn up on one side of the table, and Pet's little rocker at the opposite side. There was a bow window, full of plants aud hyacinths, blooming in glass. And two sides of the room had book-cases from the floor to the ceiling.

"Oh! how nice!" cried Pet as she sat down in her little chair and began to rock herself.

"Now my dear, what are you going to do until bed-time? You will have two whole hours to spend as you please."

"I don't know, Aunty. What do you think I'd best do?"

"Suppose you write to Cousin Alice and tell her about our ramble. She will be glad to know that the wild-flowers are in bloom."

"Thank you, Aunty, I'm glad you thought of it. Poor Alice, I wish she lived in the country. It must be so dismal to be shut up in that great town."

And Pet ran to fetch her slate and pencil, and was back again directly and writing away as fast as her fingers could move, with a smile on her lips, and an eager light in her eyes. Aunt Kate was knitting, with an open book on the table beside her; but she looked at Pet's bright face oftener than at the pages of her book. Long before the two hours were up, Pet had written closely over both sides of her slate, and laid it away carefully in one of the drawers of Aunt Katie's table, to be copied on the morrow. She sat looking thoughtfully into the fire while Aunt Kate turned the heel in the tiny scarlet sock that she was knitting for Pet's baby brother. As Pet drew a long breath, Aunt Kate looked np and said:

"A penny for your thoughts, my dear."

"They're not worth a penny. But I would give something to be rid of them. It's that old 'composition' again. I don't believe I shall sleep to-night, for thinking of it."

Aunt Kate laughed softly, and tapped with her knitting-needle on the drawer in which the slate was safely stowed away. Pet is very bright, although she doesn't like to write "compositions," and in a minute she had her arms around Aunt Kate's neck and was patting her cheeks and kissing her, half laughing and half crying at once.

"Oh! you darling of an Aunty! To think of me writing a 'composition' without knowing it. I never heard of such a thing. And so easy, too! I wish all the girls had an Aunt Kate."—*Independent.*

WHAT OUR BOYS ARE READING.

PROF. W. C. SUMNER.

[The following timely article, from the pen of the well-known Professor of Yale College, appeared in *Scribner's Magazine* for March, and is deserving of careful reading by every parent.—ED.]

FEW gentlemen, who have occasion to visit news-offices, can have failed to notice the periodical literature for boys, which has been growing up during the last few years. The increase in the number of these papers and magazines, and the appearance, from time to time, of new ones, which, to judge by the pictures, are always worse than the old, seem to indicate that they find a wide market. Moreover, they appear not only among the idle and vicious boys in great cities, but also among school-boys whose parents are careful about the influences brought to bear on their children. No student of social phenomena can pass with neglect facts of this kind,—so practical, and so important in their possible effects on society.

The writer was confirmed in the determination to examine this literature, by happening to observe, last summer, the eagerness with which some of these papers were read, and the apparent familiarity with which they were discussed, by a number of boys, who seemed to be returning from boarding-school, and to belong to families which enjoy good social advantages. The number of copies examined for the present purpose was not large, but they were taken at random and from all the different periodicals to be found.

These periodicals contain stories, songs, mock speeches, and negro minstrel dialogues and nothing else. The literary material is either intensely stupid, or spiced to the highest degree with sensation. The stories are about hunting, Indian warfare, California desperado life, pirates, wild sea adventure, highwaymen, crimes and horrible accidents, horrors (tortures and snake stories), gamblers, practical jokes, the life of vagabond boys, and the wild behavior of dissipated boys in great cities. This catalogue is exhaustive. There are no other stories. The dialogue is short, sharp, and continuous. It is broken by the minimum of description and by no preaching. It is almost entirely in slang of the most exaggerated kind, and of every variety,—that of the sea, of California, and of the Bowery, of negroes, "Dutchmen," Yankees, Chinese, and Indians, to say nothing of that of a score of the most irregular and questionable occupations ever followed by men. When the stories even nominally treat of school-life, they say nothing of *school* life. There is simply a succession of practical jokes, mischief, outrages, heroic but impossible feats, fighting, and horrors, but nothing about the business of school, any more than if the house in which the boys live were a summer boarding-house.

The exciting sensational incidents in these stories are introduced by force, apparently for the mere purpose of producing a highly spiced mixture. One of the school stories before us has a "local color" which is purely English, although the names are Americanized. The mixture is ridiculous in the extreme. The hero is the son of a "country gentleman" of Ohio, and comes to school with an old drunkard, "ex-butler" of the Ohio country gentleman, whom he allows to join him at the Grand Central Depot. This scandalous old rascal is kept in the story, apparently because an old drunkard is either a good instrument or a good victim for practical jokes. The hero goes to dine with a gentleman whose place, near the school, is called the "Priory." While waiting for dinner he goes out for a stroll in the "Park." He rescues a girl from drowning, sends back to school for another suit of clothes, goes out again and takes a ride on a bison, is thrown off, strikes, in falling, a professor, who is fortunately fat enough to break his fall, goes to the "snake house" with the professor, is fascinated by the rattle-snake which gets loose, seizes the reptile and throws it away after it has bitten through the professor's trowsers—all before dinner. All the teachers, of course, are sneaks and blackguards. In this same story, one of the assistant teachers (usher, he is called) gets drunk and insults the principal, whereupon the latter holds the nozzle, while he directs some of the boys to work a garden pump, and throws water on the assistant, who lies helplessly drunk on the grass,—all of which is enforced by a picture. There is not a decent good boy in the story. There is not even the old type of sneaking good boy. The sneaks and bullies are all despicable in the extreme. The heroes

are continually devising mischief which is mean and cruel, but which is here represented as smart and funny. They all have a dare-devil character, and brave the principal's rod as one of the smallest dangers of life. There is a great deal of the traditional English brutality in exaggerated forms. The nearest approach to anything respectable is that *after* another boy has been whipped for mischief done by the hero, the latter tells his friend that they ought to have confessed, but the friend replies with the crushing rejoinder that then there would only have been three flogged instead of one.

Another type of hero very common in these stories is the city youth, son of a rich father, who does not give his son as much pocket money as the latter considers suitable. This constitutes stinginess on the father's part, although it might be considered pardonable, seeing that these young men drink champagne every day, treat the crowd generally when they drink, and play billiards for $100 a game. The father, in this class of stories, is represented as secretly vicious and hypocritically pious. In the specimen of this class before us the young man is "discovered" in the Police Court as a prisoner, whence he is remanded to the Tombs. He has been arrested for collaring a big policeman, to prevent him from overtaking a girl charged with pocket-picking. He interfered because he judged from the girl's face that she was innocent, and it is suggested, for future development in the story, that she was running away from insult, and that the cry of "stop thief" was to get help from the police and others to seize her. The hero, who is the son of a man worth five millions, and who is in prison under an assumed name, now sends for his father's clerk and demands $1,000, saying that otherwise he will declare his real name and disgrace his family. He gets the money. He then sends for a notorious Tombs lawyer, to whom he gives $500. With this sum his release is easily procured. He then starts with his cousin to initiate the latter into life in New York. They go to a thieves' college, where they see a young fellow graduated. His part consists in taking things from the pockets of a hanging figure, to the garments of which bells are attached, without causing the bells to ring. Of this a full-page illustration is given. The two young men then go up the Bowery to a beer saloon where the hero sustains his character by his vulgar familiarity with the girl waiters. Next they hear a row in a side street. They find a crowd collected watching a woman who hangs from a third-story window, while her drunken husband beats and cuts her hands to make her fall. The hero solves this situation by drawing his revolver and shooting the man. As he and his companion withdraw unobserved, the former wards off the compliments of the latter by saying modestly that he could not bear to stand there and see such a crowd looking on, and not knowing what to do, so he just did the proper thing. Next day the hero, meeting the thieves' college graduate in the corridor of the Fifth Avenue Hotel, agrees to receive and hold for him any booty he may seize in the bar-room; which he does. At night he and his friend go to a disreputable masked ball, where the hero recognizes his father in disguise amongst the dancers. Securing a place in the same set, during a pause in the dance he snatches the mask from his own face and his father's at the same moment. This edifying incident is enforcd by a full-page illustration. A friend suggests the question, What demon of truthfulness makes the artist put such brutal and vulgar faces on the men? In this class of stories, fathers and sons are represented as natural enemies, and the true position for the son is that of suspicion and armed peace.

Another type of hero who figures largely in these stories is the vagabond boy, in the streets of a great city, in the Rocky Mountains, or at sea. Sometimes he has some cleverness in singing, dancing, or ventriloquism, or negro acting, and he gains a precarious living while roaming about. This vagabond life of adventure is represented as interesting and enticing, and, when the hero rises from vagabond life to flash life, that is represented as success. Respectable home life, on the other hand, is not depicted at all, and is only referred to as stupid and below the ambition of a clever youth. Industry and economy in some regular pursuit, or in study are never mentioned at all. Generosity does not consist even in luxurious expenditure, but in wasting money. The type seems to be that of the gambler, one day, "flush" and wasteful, another day ruined and in misery.

There is another type of boy who sometimes furnishes the hero of a story, but who also more or less figures in all of them. That is the imp of mischief,—the sort of a boy who is an intolerable nuisance to the neighborhood. The stories are told from the standpoint of the boy, so that he seems to be a fine fellow, and all the world, which is against him, is unjust and overbearing. His father, the immediate representative of society, executes its judgment with the rod, which again is an insult to the high-spirited youth, and produces

on his side, either open war, or a dignified retreat to some distant region. Here is a story, for instance, of a boy who was left in charge of a country grocery store. To amuse his leisure, he takes a lump of butter from the stock and greases the platform in front of the store. Several village characters among them an old maid, the parson, and the squire, come to perform on this arena for the amusement of the youth and one or two of his friends. While the squire is trying to get off the platform, the owner of the grocery returns, and he and the squire have a fight on the grass-plot over the question whether the grocer greased his own platform or not. Next comes Nemesis in the shape of the boy's father. The conversation between these two, and the denouement may be worth quoting. In the soliloquy at the end there seems to be a reminiscence of Fisk:

"James," said he, "you are breaking my heart with your incorrigible conduct."

"Is dat a chowder-gag?" calmly inquired Jimmy.

"Slang—slang, always slang!" groaned his father. "James will you never reform?"

"Don't wanter; I'm good enough now."

"Think of what you might be, a pattern boy, a—"

"Brass-bound angel, silver-plated cherub, little tin missionary on rollers," put in Jimmy, apparently in confidence to a fly on the ceiling.

"Actually sassing his protector," the deacon said. "Oh, James, you wicked son of Belial."

"Pop's name was Dennis, and he was a short-haired Cincinnati ham," indignantly corrected Jimmy. "I don't know anybody named Belial."

The deacon made a horrified mouth.

"Will you never hearken in quietude and meekness of spirit to words of reproval aud advice?" said he.

"Durned sight ruther listen to funny stories," muttered Jimmy.

"You are hopeless," sighed the deacon, "and I shall have to chastise you."

"Dat means a week's soreness." Jimmy reflected; then he changed his tune. "Let me off this time, dad, and I'll be the best boy you ever saw after dis. Stay in nights, stop chewing tobacco, clean my teeth every morning and welt the life out of anybody dat won't say their prayers regular and go to church every day in the week."

The deacon nodded his head the wrong way.

"You can't play that on the old man again," he said; "it's lost its varnish, it's played out. Step up, my son."

Unwillingly Jimmy stepped up. In a moment he was stepping up more than ever, for the deacon was pelting him all over with a stout switch, which felt the reverse of agreeable; but finally he was released and crawled dolefully up to bed. There are things nicer than going to bed at four o'clock on a bright, breezy fall day, and Jimmy knew so. "This here is getting awful stale," he meditated, rolling and tossing in his cot, "and you can smother me with fish-cakes if I stand it. I'm going to run away, and come back to dis old one-hoss town when I'm a man, in a gold band wagon with silver wheels and six Maltese mules a-drawin' it. Probably the old man will be in the poor-house then, swallerin' shadow soup with an iron spoon, and it will make him cranky to think dat he didn't used ter let me have my own way and boss things. Yes, by golly, I'll give him the sublime skip."

The songs and dialogues are almost all utterly stupid. The dialogues depend for any interest they have on the most vapid kind of negro minstrel buffoonery. The songs, without having any distinct character, seem often to be calculated to win applause from tramps and rioters. The verse, of all before us, which has the most point to it, is the following. What the point is requires no elucidation:

Boss Tweed is a man most talked about now,
His departure last winter caused a great row;
Of course we all knew it was not a square game,
But show me the man who would not do the same.

When Sweeny, Genet, and Dick Connolly took flight,
He stood here alone and made a good fight;
He did wrong, but when poor men were sadly in need,
The first to assist them was William M. Tweed.

These stories are not markedly profane, and they are not obscene. They are indescribably vulgar. They represent boys as engaging all the time in a rowdy type of drinking. The heroes are either swaggering, vulgar swells, of the rowdy style, or they are in the vagabond mass below the rowdy swell. They are continually associating with criminals, gamblers, and low people who live by their wits. The theatre of the stories is always disreputable. The proceedings and methods of persons of the criminal and disreputable classes, who appear in the stories, are all described in detail. The boy reader obtains a theoretical and literary acquaintance with methods of fraud and crime. Sometimes drunkenness is represented in its disgrace and misery, but generally drinking is represented as jolly and entertaining, and there is no suggestion that boys who act as the boys in these stories do ever have to pay any penalty for it in after life. The persons who are held up to admiration are the heroes and heroines of bar-rooms, concert saloons, variety theatres, and negro minstrel troupes.

From the specimens which we have examined we may generalize the following in regard to the views of life which these stories inculcate, and the code of morals and manners which they teach:

The first thing which a boy ought to acquire is physical strength for fighting purposes. The feats of strength performed by these youngsters in combat with men and animals are ridiculous in the extreme. In regard to details, the supposed code of English brutality prevails, especially in the stories which have

English local color, but it is always mixed with the code of the revolver, and, in many of the stories, the latter is taught in its fullness. The youngsters generally carry revolvers and use them at their discretion. Every youth who aspires to manliness ought to get and carry a revolver.

A boy ought to cheat the penurious father who does not give him as much money as he finds necessary, and ought to compel him to pay. A good way to force him to pay liberally, and at the same time to stop criticising his son's habits, is to find out his own vices (he always has some) and then to levy blackmail on him.

Every boy who does not want to be "green" and "soft" ought to "see the elephant." All fine, manly young fellows are familiar with the actors and singers at variety theatres, and the girl waiters at concert saloons.

As to drinking, the bar-room code is taught. The boys stop in at bar-rooms all along the street, and swallow drinks standing or leaning with rowdy grace on the bar. They treat and are treated, and consider it insulting to refuse or to be refused. The good fellows meet every one on a footing of equality—above all in a bar-room.

Quiet home-life is stupid and unmanly. Boys brought up in it never know the world or life. They have to work hard and to bow down to false doctrines which parsons and teachers, in league with parents, have invented against boys. To become a true man, a boy must break with respectability and join the vagabonds and the swell mobs.

No fine young fellow, who knows life, need mind the law, still less the police. The latter are all stupid louts. If a boy's father is rich and he has money, he can easily find smart lawyers (advertisement gratis) who can get the boy out of prison, and will dine with him at Delmonico's afterward. The sympathies of a manly young fellow are with criminals against the law, and he conceals crime when he can.

Whatever good or ill happen to a young man he should always be gay. The only ills in question are physical pain or lack of money. These should be borne with gayety and indifference, but should not alter the philosophy of life.

As to the rod, it is not so easy to generalize. Teachers and parents, in these stories, act faithfully up to Solomon's precept. When a father flogs his son, the true doctrine seems to be that the son should run away and seek a life of adventure. When he does this he has no difficulty in finding friends, or in living by his wits, so that he makes money and then comes back rich and glorious, to find his father in the poor-house.

These periodicals seem to be intended for boys from twelve to sixteen years of age, al though they often treat of older persons. Probably many boys outgrow them and come to see the folly and falsehood of them. It is impossible, however, that so much corruption should be afloat and not exert some influence. We say nothing of the great harm which is done to boys of that age, by the nervous excitement of reading harrowing and sensational stories, because the literature before us only participates in that harm with other literature of far higher pretensions. But what we have said suffices to show that these papers poison boys' minds with views of life which are so base and false as to destroy all manliness and all chances of true success. How far they are read by boys of good home influences we are, of course, unable to say. They certainly are within the reach of all. They can be easily obtained, and easily concealed, and it is a question for parents and teachers how far this is done. Persons under those responsibilities ought certainly to know what the character of this literature is.

SCHOOL MUSEUMS.

PROF. E. A. APGAR.

A PART of the following, upon the collecting and preserving of insects is taken from a pamphlet by A. S. Packard, M. D., published by the Smithsonian Institution. This work will be found of great use to all who wish to make an extensive collection of insects.

Good Localities for Insects.—Loamy soils of swamps and marshes are the best, sandy districts next, and clayey ones are the poorest. Gardens and farms, borders of woods and banks of streams and ponds are much better than dense forests, or open, treeless tracts.

In winter and early spring the moss on tree trunks should be shaken on paper for beetles and Hymenoptera, and the twigs examined for the pupæ of moths. The trunks of decaying trees will contain under the bark and in the decaying wood many kinds of beetles and flies. The pith of the elder, raspberry and blackberry will contain many bees.

All galls on wood and leaves should be opened for the flies that inhabit them in the larva condition. A large number of kinds of insects can be found in the water of streams

and ponds. The earth around the roots of trees will be found to shelter many larvæ forms. Certain kinds of beetles and ants live on the ground under sticks and stones.

The plowing of fields will reveal many kinds in pupæ condition of both beetles and moths. Butterfly and moth pupæ will be found on fences and the twigs of low plants. Dead animals, if placed in positions where they can be examined night and morning, will form traps for a large number of kinds that can be found in no other way. If frogs and toads are killed in the early morning and their stomachs examined, many rare kinds can be found in good condition for the cabinet.

Insects that are found in pupæ form should be kept in as nearly the same condition in regard to moisture and warmth as the place in which they were found, in order that they may come out in good form. If found in the larvæ (or worm) condition they will need to be fed on the kind of food which they eat; this can usually be determined by the position in which they were found. Boxes of the size used for crayons will be found useful for the rearing of many kinds of larvæ. If the lids are replaced by glass ones the eating and the transformations can be watched.

Instruments to be used.—The most important is the *collecting net.* The net described can be made by any one; many more elaborate ones are used; some of them are made so that they can be folded up and carried in the pocket or the hat.

Take a piece of unannealed wire a little more than and eighth of an inch in diameter and four feet long, bend it in the form of a hoop a foot in diameter. The two ends, each about five inches long, should be bent out straight to enable you to fasten it to the handle, which should be about a half inch in diameter at the smaller end, and four or five feet long. A slight groove should be made in each side of the handle for the straight ends of the hoop. The hoop is to be fastened to the pole by winding either with wire or strong cord the whole five inches. The net is to be made of thin strong mosquito netting. A circular piece a little more than a yard across would be the right size The edge of this is to be shirred up and sewed to a strip of muslin thirty-eight inches long, and then this muslin is to be sewed to the loop.

When used to catch insects on the wing it should not be brought to the ground, but as soon as the insect is within the net a little side movement will cause the end of the net containing the insect to fall over the edge of the hoop.

The next important instrument for use is the *collecting bottle.* In this is placed the poison used for killing the insects. The different substances used for this purpose are cyanide of potassium, ether, chloroform and benzine. I have killed all sizes of animals with benzine, from a fox to a fly. The best method I know for its use is the following: Take a quart glass preserving jar, mix some plaster of Paris with water so that it is just thin enough to run, and fill the bottom of the jar about an inch deep with it. Let it harden and leave it open for a day or two till about all the water has evaporated from it that will do so. Now throw in a little benzine and close the top. It is now ready for use; the benzine will be absorbed by the porous plaster, and only the vapor will escape into the jar. If at any time the liquid wets the top of the plaster, the jar should be opened till the surplus has evaporated. The jar, when in use, should be open only when insects are being placed in or taken from it.

When an insect has been caught in the net, the end containing the insect should be held by the hand just over the open jar, and the insect dropped into it.

During a collecting trip all the insects caught can be left in the jar. The benzine will overpower the new insects thrown in so soon that there will be no danger that they, in struggling, will injure those already in. All insects, and especially butterflies and moths, should be touched with the hands as little as possible.

INDUSTRIAL SCHOOLS IN EUROPE.

HON. B. G. NORTHROP,
State Supt. Public Instruction, Connecticut.

NO feature of the educational systems of Germany, Switzerland, Austria, Belgium, France, and other European countries, is more striking to an American observer than the large number of Industrial Schools specially designed to train apprentices and make skilled workmen and competent foremen. These schools are very numerous, and as various as the kinds of industry pursued in each country or province. There has been the greatest progress in manufactures in those countries where these schools have been maintained longest and most liberally. Geneva has for many years maintained a horological school, and the Swiss watches have long been celebrated throughout the world. Last summer I visited the new Horological Institute, then

building in Geneva—a magnificent edifice to cost over $200,000—and also witnessed the work of the old school then in its old quarters. The course of study and practice covers three years. There were seven instructors, who are experts both in the theory and practice. No one can graduate till he has proved his skill again and again, by making an entire watch of standard excellence.

The same attention to minute details is seen in the industrial school at Lyons, France, to which the pre-eminence of that city in the manufacture of silk is largely due. It has twelve professors, and the course of study occupies three years. Here, as in all industrial schools, a prominent study is *drawing*—drawing ornaments, tinted drawings, and sketching plans of machines from memory. Thorough instruction is given in every detail relating to the manufacture of textile fabrics, especially of silks; the natural history of silk; treatment of the silk worm and cocoon; spinning, throwing, weaving, and testing of silks; sorting and cleaning; winding, warping, and beaming; changing of looms for weaving different styles; defects in operations and their remedies; decomposition of tissues; chemistry, especially as applied to dyeing and printing; physics, with its applications to heating steam boilers, to drying and ventilation; mechanics, embracing prime motors, materials, and construction; hygiene, including physiology, noxious and useful animals, dangerous and unhealthy occupations; contagious diseases and how to avoid taking them; rural economy and "industrial plants." Manual exercises are conducted in the workshops in making, mending, putting up, and shipping looms, in turning, filing, forging, fitting, and various joiner's and machinist's work. Frequent visits are made to the various factories in Lyons under the lead of an instructor, where every part and process is fully explained. The students afterwards draw from memory plans of patterns and of machines.

About one hundred pupils, on an average, are in attendance. The regular charge for tuition, use of laboratories, and work-shops, is $140 a year. Indigent students are aided by the Chamber of Commerce and Municipal Council of Lyons, so that a portion only pay the full tuition. That this school, conducted without aid from the government of France, should be so liberally supported by the citizens of Lyons, and continue to flourish for so long a period, is ample evidence of its great usefulness in the opinion of the most competent judges.

More than sixty years ago France started special schools in the arts of designing, engraving, and dyeing; in silk and ribbon-weaving, and lace-making; in carving, stone-cutting, and diamond-cutting (hence the diamond-cutting for the world is still carried on mainly in Paris); in porcelain and various ceramic productions; and the pre-eminence thus gained is still retained. The artistic manufacturers of France command the markets of the world. The industrial schools more recently organized in Germany, Switzerland, Belgium, Austria, Italy and England, which in the aggregate are numbered by thousands, make these nations formidable competitors in artistic work.

When invited by the minister of public instruction of France to visit the National Porcelain Factory at Sevres, I expressed to him surprise that such an establishment should come under the supervision of the educational department, to which he replied, "It is because it is the duty of this department to supervise and control the preparatory school for Sevres, which you shall first visit." On inspecting this school of design in Paris, I found in the lower rooms the methods and work of a first-class drawing-school. But in the upper rooms the classes were painting on elegant goblets, cups, plates, vases, and other choicer wares, just brought from Sevres, and to return there for baking. After witnessing this truly artistic work, I no longer wondered that in the Sevres factory itself the artisan had indeed become the artist, and that only men of princely wealth could procure the products of this unrivaled establishment.

In Belgium the girls have shared the advantages of industrial schools as well as the boys. The schools for training in lace-making and embroidering in Brussels have long been celebrated, and kindred schools have more recently been opened in Rowles, Ghent, Ash, Deerlyk, and in many other places in this little kingdom. To those familiar with this fact, it was no surprise that Belgium lace shown at the Philadelphia Exposition was unrivaled. Some industrial schools are maintained wholly by the central government. Others partially, and still others are supported by endowments, and many are private institutions, dependent mostly on tuition for support. A large number called Apprentice Schools are maintained by benevolent associations. These are designed to train boys and girls both in skilled manipulations in various trades, and in the practical studies and theories most helpful in such pursuits.

Belgium, with about fifty industrial schools, and fifteen thousand apprentices graduated from them; Germany with over fifty-two thousand apprentices in fourteen hundred and fifty industrial schools; and France with twelve thousand industrial scholars, show the practical appreciation of these institutions in those countries which distanced the competition of surrounding nations in the great markets of the world. Steam and the telegraph are bringing all nations into such near neighborhood, that industrial ascendency will belong to that country that provides the best industrial education.

THE TRIALS OF CHILDREN.

"Their angels do always behold the face of my Father."

NO class of subjects is more largely dwelt upon than that which spreads before us for our sympathy, the trials and tribulations, of mankind generally. That they are many and grievous we all do know, but our little ones have *their* trials, too; and a quiet talk over this phase of the thing may not be without its value, as suggestive of thoughts that too seldom engage our attention.

Let us take a walk down the aisles of our school room this pleasant morning, among the half a hundred little fettered souls, and make a general survey. No need to tell them just why you are there—the very fact of your presence, with a word and a smile scattered here and there, is ample cause for a bright smile in return. But now we are there for a purpose,—looking for reasons, and shall we not find some to prove the fact of "children's trials?" Yes, right here, by their very presence this lovely morning, we see one. Actually, to the little feet which so love to run and jump over the green earth, or even through the dusty streets,—no matter where, so that they are *free*,—is it no trial, think you, to come to a dead stand-still, ranged in line and steadied after the plummet order? Can you really wonder that, sometimes, if it is not *very* pleasant within the walls, they break away from bonds and assert their primitive need? This is no argument in favor of truancy,—please do me the favor not to draw such an inference; but only to prove to you that it requires a positive effort,—unconscious, it may be, but still an effort,—to turn the feet, each day, toward the place where this quiet is exacted.

But we have all the sympathy in the world with the little fellows, so while duty calls upon us to be firm in the performance of this particular duty, let us bear in mind that it is one of the children's trials to so comport themselves that there is no necessity for a reprimand. Little heads love to turn; I should like to see the man or woman who hasn't an almost irresistible desire to look round, if even the smallest occasion demands: and, demanding, show me the full-grown head that *wouldn't* turn round on provocation, so true is it that some element in the character,—is it curiosity?—must be satisfied. How, then, when "mischief-John" attempts to set half-a-dozen by the ears in his immediate vicinity? Perhaps the disclosure he seeks to make is not of importance enough to change the affairs of the nation, or to corrupt politicians, but is it no trial for the tempted to resist?

Look at that lunch neatly done up, fresh from home and mother, tucked away so safely in the corner of the desk. The little fingers are itching to make their way in among the dainties, the little mouth is watering to have just one taste, and the nose is a constant reminder of the joys of the feast to come! We cannot fetter thoughts, you know; they will run riot over that little parcel. Indeed, how do we know but the child ate his breakfast so long ago that he is really hungry, and knowing all the time that he has the means within his reach to satisfy his wants, is it no trial for him to await in patience *your* time? A half-eaten apple, with its juice and its pulp in such alarming proximity to the senses, which must forego and be denied, is a trial of huge proportions.

I tell you these things, which seem so small to us, are the mountains of a child's existence. He gets over them, through much tribulation; and while we don't know the exact experience of any one,—save only our own!—we yet know, if we will but stop to think, that there is many a stumble and a tip-up before he gets fairly over. Childhood's tears are likened to April showers,—quickly over,—and so they are, but oh, how deep and intense while they do last! A little one loses a trivial thing, and lo! the flood-gates are opened and the showers come. He has had but a limited experience, my friend, and to him the treasures of Golconda would hardly compensate him for his loss! The possessions of a child can usually be condensed into one pocket, but to intrude upon its sacredness is to rob him of what he holds very precious. His father's bank, maybe, holds all *his* earthly possessions, and the feelings that come to him, should any burglar's hand, for instance, revel too freely amid its treasures, are only a type of those which come to the little child when

what he holds so dear is taken from him. Is it no trial, then, for him to submit to you his treasure? His little heart bleeds at every throb. It doesn't last long, to be sure, and it is well it does not, but the *trial* is the same.

There is a phase of trial, however, which our survey reveals to us, of infinitely larger compass. Look into that face; read the lines of suffering about the sweet mouth! There is a story of privation there,—no tender sympathy at home; no kind hand to smooth the rough way,—to pick away the thorns; the privation may not be of food or raiment, and yet be as truly a dearth of food to the hungry soul! Is it no trial to bear the burden of life to that little child? If love be *always* wanting, meat and drink will not make him happy; and one has reason to shrink before the thought of the character which may be thus developed; a character of indifference, of hardihood, and perhaps, in later years, of revenge for such a fate. O yes, this is too severe a trial for one to bear unscathed! But see! now is the time, and here, in your schoolroom, is the place, to bring about a different order of things. The little spirit is plastic, easily moulded, and what is wanting everywhere else can be made up here.

The teacher holds more power for weal or woe than she really knows; and deciphering character, as she should certainly try to do, and applying herself accordingly to remedy such evils, her influence is well-nigh boundless.

It is one thing to teach, and it is quite another to make the children *love* that teaching; and in proportion to the love engendered, the trials melt away and disappear. If it is only hard drill-work and nothing more, with no expressed appreciation of the labor done,—no matter if it be bunglingly, so it is conscientiously done—then an opportunity is persistently lost to reduce the array of "trials" which beset the paths of our charge.

One little face haunts me always: a sweet, sad face, on which in the six months he was under my care, *I never saw a smile!* Interested ever; of perfect behavior; the little head true to the line; the little feet still and quiet; clean in dress; neat in person; never absent; in all things a model scholar! Where was the baneful secret? what was the primary cause of this endless melancholy? Ah! parents don't know what they do when they engender such burdens on their helpless offspring!

Dear little fellow! no beguiling the sad lines to ripple into smiles, no breaking through the settled expression, which, though so solemn, was ineffably sweet. My heart went out to him in love, and though his little hand would steal into mine and the gentle eyes seek mine inquiringly, he never for one moment forgot to be sad! I don't know where he is now; but though my mortal eyes did not see the angel which was round him, my inner eyes are conscious of its presence, and the knowledge comes to me sweet and powerful, that my boy had an inheritance from the beginning, and that it was nearer to him then than I knew!

It is very seldom that childhood is constrained to be habitually melancholy; indeed, this is my one solitary example: but the little fellow was happy in school; nothing could induce him to wander away; and I fancy the secret of it was, he found there what little of happiness was destined to fall to his lot!

Teachers, make them *all* so, if you can; there are trials enough for them to bear at the very best: book and work are not so much the burden, as the *re*straint and *con*straint. Seek to lift all that lies in your power, and in these high-pressure days, while you must peremptorily reach the standard, put your love and gentleness underneath and bear them over the breakers; remembering that for every one of the little immortals you are nurturing, there is an attendant angel who always may look upon "the face of the Father!"

Cor. N. E. Journal of Education.

AN EDUCATIONAL MUSEUM.

JACOB ENNIS.

A SURVEY of the Geology and Mineralogy of Pennsylvania has been made at great expense, with special reference to mining, to agriculture, and to other branches of industry; such as the discovery of sand for making glass, clays for porcelain, limestone fitted for hydraulic cement, and materials for fire-bricks and other purposes. Oil wells and brine wells are also included in the investigation. Separate geological maps are in the rapid course of construction for every county in the State, as well as a general geological map of our entire State. Specimens of the rocks and fossil remains of every county are collected to illustrate the county maps. When these county collections, each one by itself, shall be displayed in some large hall, along with the special maps of every county, it will be a very easy thing to learn the geological structure and the industrial resources of every county in our State. What a mine of intellectual wealth will here be opened for every child in every public school! The geology of Pennsylvania will be as easily studied on these maps, as its geography. The rocks by the wayside will then give information to the girls and boys as they daily go back and forth to school.

The very large collections made by the survey are now packed up in boxes and barrels, and although our worthy Governor has recommended the building

of a large edifice to hold and display them, the legislature has not responded. But it is high time that a movement be made. These precious treasures should be on exhibition for all the people, especially for the teachers, and they should now be the rich fountains of knowledge.

Let us suppose a large building to show these specimens, erected in Harrisburg, fronting on the capitol square. It would have to be large to hold the collection. Along the walls the glass-doored cases should not be higher than eight feet. In round numbers there are, or soon will be, 70 counties in our State. Each county would require about 15 feet; these two numbers multiplied would give 1050 feet of wall length for the geology and mineralogy alone. Other space would be required for specimens of the botany and zoölogy of our State. Still further space would be needed for specimens of philosophical and chemical apparatus, such as are specially fitted and to be recommended for the public schools; an EDUCATIONAL MUSEUM in fact. Taking all together, it is very easy to see what a large collection we would have, and what profitable results would flow from so rich a fountain of knowledge to all the schools.

The legislators assembling annually from every county, would then understand their own counties far better than they ever did before. The common, well-known rocks of their own fields and mountains, will be seen by them in a new light, with an interest they had never felt previously. They would want every teacher of their counties to come to Harrisburg, and learn the geological wonders of their own neighborhood, and teach them to the children. And no one would be more interested in these things than the children, with their ever wakeful curiosity.

The county and borough superintendents might assemble, and during six days they might listen to three lectures a day on geology and mineralogy. This would give them eighteen lectures in all, well illustrated by the great state collection; then they might open their summer schools for the teachers, who in their turn would be instructed in what the superintendents had learned, and the children in the next place would be the recipients of the precious knowledge. Children are never happier than when they are making collections of minerals—new and curious stones. At present, when they ask questions about the rocks, as all children will ask, they are disappointed in getting an answer, and their natural curiosity is deadened. But with a teacher alive to the geology and mineralogy of our country, every girl and boy could be delighted with fresh instruction. It is impossible to estimate the value of such instruction, as the pupils grow up to be men and women.

To this magnificent Geological Hall and Educational Musenm at Harrisburg, the principals and the teachers of the State Normal Schools might assemble, to hear lectures illustrated by our Pennsylvania rocks and fossils, and by the best devised philosophical apparatus. They would go back to their Normal Schools richly laden with new and practical knowledge; and the teachers whom they would raise up, would be able to teach the natural sciences practically and experimentally in all the lower schools. All this could not be accomplished in one or two years; but most certainly before many years, the new Geological Hall and Educational Museum would make themselves felt in every county and town in our state.

All this is clear enough. It now remains for the legislature to make provision for such a building and its management. Obviously it should be under the control of the Department of Public Instruction. The State survey has been made for public information, and for this alone. Therefore the Department of Public Instruction is the natural guardian and agency for the geological collections.

The whole civilized world is waking up to the importance of this kind of knowledge. Every country in Europe has its large collections, and by such means they attract thither many thousands of Americans who every year spend there many millions of dollars. The British Government for many years has appropriated $500,000 per annum to the British Museum. A similar sum is given every year by the Government of France to the Garden of Plants at Paris. Our own Congress appropriates yearly $20,000 to our National Museum at Washington. The State of New York every year devotes $20,000 to its own geological collection at Albany. The legislature of that same State has given $900,000 for building and stocking a museum of Natural History in the Central Park at New York. The legislature of Massachusetts has bestowed $265-000 to the Museum of Comparative Zoölogy at Cambridge, and $90,000 to the Boston Society of Natural History, and $180,000 to the Institute of Technology in Boston. To the latter institution it gives annually $4,000. Thus it appears that, over and above its annual grants, Massachusetts has appropriated $535,000 to three institutions at its capital towards advancing this kind of valuable knowledge.

In view of all these praiseworthy examples, is Pennsylvania to lag ignobly behind? I believe not. Our State has her geological survey at work, which has made a rich collection of materials. Every county is contributing its specimens. Are these specimens to be forever shut up in boxes, and stowed away out of sight? Most certainly not. Then let a strong and a noble effort be made at once. Our Governor has already spoken. Let a building be ordered by our legislature where all these treasures may be seen. Let every superintendent and every teacher in our State have the opportunity to learn how our rock-ribbed hills are constructed, and what are the mineral treasures stored in the ground. Let every child be told of the wonders of geology, and how the common stones by the wayside were created.

SCHOOL SAVINGS BANKS.

HON. EDWARD SEARING.

IT has long been my belief that the public school system ought to be more potent for good than it now is in the direction of moral influences and good habits. Judging from the school code, the sole object of the system is to give formal instruction in certain branches of knowledge—orthography, reading, writing, grammar, geography, arithmetic, etc. But a mere knowledge of these things is by no means enough to qualify for right living and good citizenship. It is right impulses and good habits, even more than the mastery of the arts of reading, writing and numbering, that make good citizens and successful men and women. The safety of the republic will not be guaranteed by the total banishment of mere illiteracy.

There is a habit, in a high degree conducive to individual and national prosperity, which it seems to me might be easily and largely fostered by the system of public instruction. I refer to the habit of saving, based on a due knowledge of the value and use of money. The American people are especially a prodigal and wasteful people. The great natural resources that have been at their command, and the ease and rapidity with which they have hitherto acquired money, have made them extravagant, and thoughtless of the future. With the frugal, thrifty and saving habits of the French, our people would to-day be the richest and most prosperous people on the globe, whereas now private and public debt weighs like an incubus upon the whole country, and pauperism is increasing more rapidly than in any other civilized land.

I have for some time regarded with interest the systematic efforts to form saving habits in the young, now being made in the public schools of Great Britain, Belgium and France, and, as giving some information on this subject, I call special attention to the following extract from a valuable paper on "Savings Banks," read at the recent session of the Social Science Convention at Saratoga, by John P. Townsend, esq., of New York, To teach children the value of money, to induce the desire and habit of saving, and to practically acquaint them early with some business forms and usages, must certainly be recognized as legitimate school work; as legitimate as instruction in theoretical arithmetic or bookkeeping, by the aid of which the business of the world is so largely conducted. That the disposition to save, as all other dispositions and habits, can be best cultivated in the young, is an educational axiom. That it is desirable for a people to possess habits of thrift will be questioned by no one. It may be doubted whether any other quality ranks higher among the elements that make up really good "citizenship" than that known as "thrift." The man who, for the sake of accumulating property, practices self-denial, and puts weekly or monthly into a savings bank his surplus earnings, is in general a good citizen. He may not be a scholar; he may even be illiterate, but he will pretty surely be industrious and law-abiding. More useful as a citizen is the illiterate but thrifty accumulator than the thriftless prodigal, who is well versed in the "three R's."

Whatever tends to enlarge in the direction of good *conduct*, truthfulness, industry, temperance, frugality, courtesy, etc., the present narrow and almost exclusively intellectual training of the schools, is to be heartily welcomed by all good men. The establishment of school savings banks on some secure basis, and the general cultivation thereby, in the young, of a habit upon which individual and national prosperity so largely depends, would I believe, have the fullest approval of thoughtful men.

Mr. Townsend, in the paper above referred to, says, in reference to teaching saving habits to the young in the public schools, as reported in the *Bankers' Safeguard:*

The penny bank system of Great Britain, which has been extended into the schools there, as well as into Belgium and France, cannot be too strongly recommended for adoption in this country. In a paper read by Mr. William Meikle, actuary of the Security Savings Bank of Glasgow, before the National Association for the Promotion of Social Science, three years ago, he says; "A remarkable experiment for teaching the young to save has been introduced into the public schools of Belgium. It originated with Mr. Laurent, professor of civil law in the University of Ghent, whose writings on the subject obtained a prize of £400, as being the best treatise, or the best invention capable of improving the physical and intellectual condition of the working classes. He maintains that the best means of causing the spirit of economy to penetrate the habits of the people is to teach their children and make them practice it.

"Nothing is easier than to inspire in the young a taste for saving. This can be best accomplished in the public schools, where the managers and teachers have constant opportunities of enforcing and illustrating the advantages of saving, and where facilities can easily be afforded for carrying out the lessons of economy by means of penny banks carried on in the schools. This has been done in Belgium with singular success. Out of the 15,392 pupils in the town of Ghent, no less than 13,032 are depositors in the savings bank, and they have to their credit $92,560, an average of more than $7 each.

"The managers testify that the system has already produced a marked effect on the social and moral life of the working classes of Ghent. The experiment is being extended to hundreds of other towns, and has created great interest throughout Belgium, in France, and the United Kingdom. I cordially commend the system to the attention of school boards and teachers, and can assure them that directors of savings banks in this country will cheerfully aid their endeavors."

He further says; "As a means of still further encouraging young people to save, the school boards of Belgium have arranged that their prizes to meritorious pupils shall consist, in whole or in part, of a savings bank book, inscribed with the pupil's name, and containing a small sum of money, which is not to be withdrawn till after a given time?"

I learn by letter recently received from M. A. de Marlarce, of Paris, that France has already more than 230,000 saving scholars in 3,200 schools.

No people need to be taught thrift more than the poorer classes of this country; on account of the ease with which money is obtained in ordinary times, owing to well-known causes, no nation, probably, is more extravagant and prodigal in expenditures, and in times like the present, inconvenience and suffering

are great. Having sung all summer, the winter finds them destitute, and without friends to succor them. But their more provident neighbors owe something to their own reputation as good citizens, and should endeavor to teach and assist them in a proper way.

Instead of soup houses in winter, let us open penny banks in summer, and by the aid of missionaries properly selected, the systematic distribution of tracts in workshops and dwellings, instruct these people how to help themselves by saving their pennies, instead of spending them in drink shops and for useless finery. How many pennies and even dollars are annually thrown away in bar-rooms and beer-gardens the data is not at hand to determine, but the receipts by the government from taxes on spirits and malt liquors give a faint idea.

The plan of establishing school penny banks is very simple, and could be put in operation by any board of education in the large cities, and by trustees and school districts in the towns and villages, without expense. An hour one day in the week might be set apart for instruction and practice in the lesson of thrift. Let a book large enough to contain the names of all the pupils in a given school be provided, ruled in twelve vertical columns for the months, which are to be subdivided into four or five for the weeks, with inter-columns for dollars and cents; this is for the register to be kept by the teacher. Cards, to be folded once like the covers of a pass book, and ruled like the register, are also necessary for each depositing scholar. Enter the deposits in the school ledger, and the corresponding amount in the depositor's book, which the pupil is to carry home with him. This comprises the needed stationery, barring pen and ink.

Let the amount received each day be deposited in some savings bank, to the credit of the school, and when the deposit of any pupil amounts to, say three dollars, let an account be opened in his own name, and a book be given him by the bank, charging the amount to the account of the school, and by the school against the pupil on the ledger; the little card is still kept to enter the pennies on, and the account runs on as at first.

The pupil is to receive no interest until he opens his account in the bank, but the school itself receives interest on the gross amount to its credit, which will pay the expense of stationery, school ledger and card pass-books; should anything be left over after paying these expenses, it might be disposed of by vote of the pupils.

Parents will very soon become interested, and not only add extra pennies to their children's deposits, but be induced to try the experiment on their own account, by making deposits in the savings bank for themselves; once the habit is begun, it tends to increase as time goes on, and it is reasonable to suppose that it will not be long before the community will begin to feel the effect, to the lessening of its taxable burdens for the support of the wretched and destitute. The experiment is worth trying, why not put it at once into practice?

To show how simple is the administration of the system in the schools of France, I subjoin the following, translated from the French by Hon. S. T. Merrill, of Beloit, and printed in the *Safeguard Almanac* for 1877:

After having made proper arrangements with the nearest city or village savings bank, the teacher informs his scholars that he is ready to receive their savings, however small they may be, and that on the first day of every month all deposits amounting to one franc, or even francs, will be deposited in the city savings bank to the credit of the pupils thus depositing, each of whom will then receive a bank book in his or her own name.

On a fixed day of every week, at the commencement of the school the instructor announces "the exercise of saving" (*exercice de l'Epargne*). Every sum, small as it may be, he records in a special book called the Register of the School Bank; each page of which, ruled with twelve vertical lines for the months of the year, and thirty-one horizontal lines for the days of the month, is apportioned to some *one pupil's* account. Detached sheets ruled in the same way are also provided, so that each scholar may have a duplicate of his or her account.

The book and sheets having been prepared, commonly by the pupils themselves, each scholar, in turn, as the roll is called, presents himself or herself before the teacher's desk, and there deposits any sum which he or she wishes to put into the School Savings Bank. The instructor in the presence of the one depositing inscribes the amount in the register on the appropriate page in the square that indicates the date of the transaction, and at the same time he makes a like entry on a separate sheet which he delivers to the pupil. This duplicate sheet is a double guaranty both for the parents and the teacher. Such is the plan pursued in each school; equally easy and simple are the transactions with the large Savings Bank.

On the first of every month the instructor adds the small amounts inscribed on each page of the register in the columns for the month just past. If the sum of any one does not reach one franc, the number of centimes or fraction of a franc is placed at the top of the column for the next month, to be added to future payments. When the total exceeds a franc or even francs he makes a memorandum of the whole or even francs opposite the name of the scholar by whom they have been deposited, and carries the fraction, if there be any, to the top of the next column, and so on through the book. This done, he take the aggregated francs and his memorandum to the large savings bank.

The cashier, having counted the money and found it to correspond in amount with the total of the teachers' memorandum, inscribes the deposits, each scholar's separately, in bank books appropriated and belonging to the pupils depositing in this way through the agency of the teacher.

These individual bank pass-books are kept by the instructor so long as the owner remains in school. However, the next day after each new deposit is made in the large savings bank, the scholar is permitted to take his book home for the inspection of his parents, but it must be returned to the custody of the teacher promptly the next day thereafter.

When a pupil leaves the school, his or her book is delivered to his or her legal representative, together with any money that may be in the school savings bank at the time; for all of which a receipt is given, written on the page of the register whereon is the scholar's account. The instructor notifies the large savings bank that such a pupil has left the school, and that his bank book has been delivered to his legal representatives.

Besides the peculiar instruction and discipline qualifying for business life, involved in the operation of school savings banks, I suggest that instruction in a kindred subject or

practical value, namely, book-keeping, ought to be universally given in the common schools. It is now neither in the list of branches required to be taught in the schools, nor one of those in which applicants for certificates are required to be examined. Yet a knowledge of the forms and processes of single-entry book-keeping would be of practical use to nearly every citizen.

EVERY-DAY ENGLISH.

THE DIFFICULTY OF SPELLING AS WE SPEAK.

RICHARD GRANT WHITE.

SOME of my readers may think that the difficulty in the way of establishing a uniform mode of spelling as we speak is greatly exaggerated. That it is not so can be shown, I believe, from the writings of the most eminent advocates of a reformed phonetic writing of English. The ablest, most learned, and most experienced of all these, by the general admission of all philologists and phonologists, is Alexander John Ellis, from whose works, and particularly from that "On Glossik" I have quoted. The title of that work, a pamphlet of thirty-two pages, as it is printed upon the title page is worth quoting at full length. It is: "On Glosik, a new sistem ov Ingglish speling, proapoazd faur konkur-ent eus, in aurder too remedi dhi difek-ts withou-t ditrak-ting from dhi valeu ov our prezent aurthog-rafi. Bei Aleksaander Jon Elis, F. R. S., F. S. A., &s., author ov 'Erli Ingglish Proanunsiai-shen,' &s. Reeprinted faur preivet serkeula-shen from dhi transakshens ov dhi Filoaloj ikel Soasei-iti for 1876." This method of writing Mr. Ellis calls "glossic," that is according to the tongue, in opposition to "nomic," the name which he gives to the conversational writing which has prevailed for the last three hundred years with few and slowly made changes. He wrote, that is composed, this very able paper in the glossic spelling, and he tells us that he found that spelling no check upon the flow of his thoughts; a fact which has some value, but not much, because Mr. Ellis has been engaged for twenty-five years and more in phonetic studies and experiments, and what would be easy to him would be impossible to others. It must be admitted that almost any intelligent and educated person can read this glossic writing with little trouble after some study. But this fact is also of small importance, because we can any of us as easily read and understand a letter misspelled from beginning to end. We can read "Josh Billings," and are sometimes not unable to laugh at him, if not with him.

Mr. Ellis proposes his glossic writing, not as final but as a transition from the present spelling to a more perfect one—"a transiteri instrooment," as he calls it. With all his earnest advocacy of reform in spelling, he does not underrate the difficulties in the way of any change. His knowledge of the subject is too great for that. He, an accomplished linguist and philologist—*facile princeps* of English phonologists—does not say "with the simplest form for a letter, and a letter for each sound in the language, there is no need of further theory—what we want is *action*," as so many others do. Of such reformers, and of such crass iconoclasm, he gives an opinion which I shall render into common English writing; "There are many in England, France, Germany, and America who have crude notions on the subject, and of these the least informed would probably be ready with cut and dried systems. But there are perhaps not twenty men in the world capable of initiating or discussing any scheme of universal writing. [True phonetic writing is, of course, of universal application.] As regards myself, I can only say that when, in times past, I imagined I could construct such an alphabet, I was very ignorant of what it had to effect, and that I have only some faint glimmerings even yet. As soon as I come out of the friendly obscurity of the study into the broad daylight of practical application, I feel how little I have yet learned, and how much remains to be accomplished. My glossic writing therefore [his last expedient] even in its most developed form is but a transitory instrument, a tool to be hereafter discarded. * * Even for English I regard it as a mere auxiliary scheme, worth trial, of educational and social, as well as literary and philological value, quite as good certainly as our present orthography and in many respects far superior to it, but not intended to supersede that orthography, in which are embalmed the treasures of English thought."

Thus speaks, modestly, and even timidly, the greatest master of English phonology that has ever lived. He leaves to others the production of their cut and dried systems. He confesses that his former notions on the subject were vain imaginations. He has found that before the test of practical application elaborated systems of reformed writing with bran new alphabets—"a letter for every sound"—crumble up into literary dust and ashes. He knows that there are hardly twenty men in the world capable even of discussing the formation of a scheme of phonetic writing. Perhaps we may be able to see, although imperfectly, and by a mere glance, as it were, when the vastness of the subject is considered, why it is that such a reform as would be practicable is so very difficult as to be practically impossible.

Mr. Ellis says, in the first place, that in glossic writing, "the ordinary letters should be used as far as possible in their most ordinary adopted senses, so that a passage written in glossic, when only representing such sounds as are acknowledged in received pronunciation, should be immediately intelligible to a nomik reader without instruction." This view of the case will commend itself to all those who have not a cut and dried system of forty-two letters, more or less, for forty-two sounds, more or less. Then comes the second requisite, which is this: "The glossic should indicate the precise sound of every word, without ambiguity, and without reference to anything but the sound, so that sound and symbol should be mechanically convertible," Yes, surely; but what sound? I think that it may be shown by the testimony of Mr. Ellis himself, and by his example and that of others, that to indicate the precise sound of every word without ambiguity is quite impossible, consistently with that certainty, uniformity, and ease of spelling without the attainment of which the reform in question would fail utterly in the very purpose for which it is agitated. For we may as well use one approximation as another, and when one is established as the means of communication between three living generations, and in it are "embalmed the treasures of English thought," there may be said to be no question as to choice.

Passing by a process of reform which compels such spelling as *auldthoa* for "although," *sein* for "sign," *skairkroa* for "scarecrow," *euzejez* for "usages,"

moesyeo for "monsieur," and *sheovaalyai* for "chevalier," although the hard necessiiy of such cruel and ludricious distortion is not without importance, let us look at Mr. Ellis's glossic spelling of some words with an eye not to its desirability or practicability for general adoption, but as indicative of the sound which he gives to those words, or rather, as I venture to say, thinks that he gives to them. I find these spellings of words which a little examination will unravel: *proanunsiaishen, akwizishen, komeunikaishen, asoashiai-shens, kwestyen, sujestyen, difikelt, praktikel, edeukaishenel.* According then to his own record of his speech, Mr. Alexander Ellis, Fellow of the Royal Society, late President of the British Philological Society, etc., gives to the syllable spelled *tion* the sound of *shen*, to that spelled *ult* the sound of *elt*, to that spelled *al* the sound of *el*, and he pronouuces "suggest" *sujest*. Now, with high personal regard for him, in addition to the utmost respect for his authority in phonetics, I believe no such thing. I have talked with him, and at one time for hours together, observing his speech closely, as I found afterward he did mine, and I am sure that he does not pronounce as he says he does, but that he gives to the syllable *tion* a sound not clearly expressible with letters, but something between *shon* and *shun;* that in "difficult" he gives the last syllable the sound of *cult*, but very shortly and lightly; and that in "practical" and "educational" his sound of the last syllable is a very short and light *al*, which is something like *le* in the last syllable of "simple," but is not *el*, following in this respect the usage of educated people. What his pronunciation of "suggest" is I shall not venture to say, but I should almost as soon expect to hear him say *susseed* for "suc-ceed" as *sujest* for "sug-gest."

This discrepancy between his appreciation of his own speech and that of another observant person is a matter of the very first importance. It is not peculiar to him and to me. In his work on English pronunciation he says, speaking of Mr. Bell, a phonologist of high and well deserved repute, "My own pronunciation of 'man' he finds frequently the same as his pronunciation of 'men,' so that to him I pronounce 'man,' *men;*" and yet Mr. Ellis records his own pronunciation as *man*. Here the two, perhaps, ablest English phonologists living, cannot agree as to the pronunciation of so simple a word as "man," and not only so, but they cannot agree as to how one of them does pronounce it.

Perfect frankness and boldness in facing difficulty are marked traits in Mr. Ellis as a philologist, and I believe as a man; and therefore it is not surprising to hear from him the following confessions, which, when considered in connection with the foregoing facts, are of great significance. They are from a foot-note in his *Glossic:* "Even among highly-educated Englishmen marked varieties of pronunciation exist. * * Hence professional orthoepists have endeavored to determine what pronunciations are correct, *but they do not agree among themselves, and they have vainly striven after principles.*" The Italic emphasis is mine. This life-time advocate of phonetic spelling, or I should rather say this honest seeker after a phonetic system, then makes the following remarkable admission: "Any system of notation for sounds should enable us to represent all the prevalent varieties, and *each person should write what he thinks best.*" That this does not apply to glossic writing as a mere record for phonetic purposes is made certain by his subsequent reference to his own glossic writing of "nature," "failure," and "verdure"—*naiteur, failyer*, and *virjer*, which, he says, "many might write *naicher, failyer*, and *verjer*. Or," he adds, "writers might even object to the use of *r* at all after *aa, au, u*, and write *naichu, failyu, vuju*, as well as *deeu, paat, laud, klaak*, for"—what does the reader think?—"for 'deer,' 'part,' 'lord,' and 'clerk.'" He does not shirk the consequences, but adds, "and they ought to do so, if they speak so. There is no reason why such usages, although stigmatized now, should not become fashionable a century hence." With this approach to uniformity and ease of spelling, by the phonetic road, on the part of its oldest and ablest seeker and advocate, I leave the subject to be continued on another occasion. *N. Y. Times.*

BREAKFAST-TABLE TALK.

REV. JOHN TODD.

ON a very cold, wintry morning, the boys who had come to keep New Year's with their uncle, came down to breakfast, the moment the bell rang. The winds howled over the fields, murmured through the limbs of the bare trees, and where they could, whistled through the key-hole. Every few moments a heavy gust would beat against the old house, but it stood firm. It was very plain there would be no going out to play that day; and it was just as plain that the boys had come down to breakfast with sharp appetites.

"Boys," said the uncle, when all were seated at the table, "what were you disputing about so early this morning? Perhaps I can help one or both of you."

"Why," said John, about twelve years of age, "we were wondering why God is so often called 'Providence.' Why should he have such a name? I said it was because he provides things, and James says that can't be the reason, because he also guards us, and yet we don't call this his 'Guardence!'"

"You have both studied Latin?"

"A little, uncle."

"What does *pro video* mean?"

"It means to *see before*, does it not?"

"Yes. Now tell me how long it has taken to get this breakfast ready?"

"How long? Why, sir, it may be an hour."

"Why, it has taken thousands of years to get this breakfast ready for your eating."

"Oh, uncle! how can that be?"

"Let us see. What fish is that before you?"

"Salmon, sir."

"Very well. He probably was hatched up some river in Greenland, several years ago, and has been kept to grow till he was a large fish. But it took years and years for the trees to grow out of which the vessel was built that went to Greenland after him. That tea, which your aunt is pouring out, most likely, grew at the foot of the hills of China, hundreds of miles from the ship that brought it here. That coffee, many years ago, for I have had it in my keeping ten years, grew in Java. A long while ago that mutton-chop grew in Canada, and the sheep were driven to us here. That salt was made from the waters of the ocean at one of the West India Islands. The wheat, that our bread was made of, grew in Missouri. That butter was made in Vermont. That sugar in your coffee, was made in the Islands of Cuba. That pepper, which I sprinkle on my meat, grew in Ceylon.

Those cups were made in France. That tin coffee-pot had to be dug out out of the mines in England. That cream is the grass and hay of our own fields turned into milk. Now, don't you see, my boys, how much time, and care and labor, and seeing before (*pro video*) it has cost to get one comfortable breakfast ready for my hungry nephews? God does all this; he foresees, provides it all, brings all these things together, at the right time and the right place, and thus he is called Providence, or the Foreseer."

"But, uncle, you said it had taken thousands of years to get this breakfast ready. We can't see that."

"What was our breakfast cooked with?"

"Cooked with! Why, with the fire, sir!"

"Yes, and what was the fire made of?"

"Made of coal."

"To be sure. And that coal was made under the ground thousands of years ago; provided for this very purpose. And thus God goes before us, years and ages before we were born; foresees what we shall need, and gets it all ready. This is providing—foreseeing. And thus he is called Providence, or Foreseer. Do you now understand!"

"Thank you, uncle, it looks plain enough now!"

The boys had got a new idea, and one that sticks like a bur. Will not teachers present this thought occasionally in their schools? It will do good.

SACRED INFLUENCES.

JOSEPH COOK.

LOOKING around the globe to-day, we see an unbroken line of Christian influences in the near future, stretching from the Yosemite to the Sandwich Islands, to Australia, Japan, India, past the Suez Canal, thence to the Bosphorus, to Germany, to England, and then across that little brook we call the Atlantic, only two seconds wide now for electricity. There are no foreign lands. Christianity at this hour reads her Scriptures, and lifts up her anthems, in two hundred languages. One-half of the missionaries of the globe may be reached from Boston by telegraph in twenty-four hours. God is making commerce his missionary.

It is incontrovertible that it was predicted ages ago, that a chosen man called yonder out of Ur of the Chaldees should become a chosen family, and this a chosen nation, and that in this nation there should appear a chosen Supreme Teacher of the race, and that he should found a chosen church, and that, to his chosen people, with zeal for good works, should ultimately be given all nations and the isles of the sea. In precisely this order world-history has unrolled itself, and is now unrolling. No man can deny this. No man can meditate adequately on this without blanched cheeks. What are the signs of the times which I have recounted on this festal morn, but added waves in this fathomlessly mysterious gulf-current? We know it began with the ripple we call Abraham. It is now almost as broad as the Atlantic itself.

What providence does, it from the first intends to do. We see what it has done. We know what it intended. It has caused this gulf-current to flow in one direction two thousand, three thousand, four thousand years. Good tidings, this gulf-current, if we float with it!—good tidings which are to be to all peoples! A Power not ourselves makes for righteousness. It has steadily caused the fittest to survive, and thus has executed a plan of choosing a peculiar people. The survival of the fittest will ultimately give the world to the fit. Are we, in our anxiety for the future, to believe that this law will alter soon? or to fear that He whose will this law expresses, and who never slumbers or sleeps, will change His plan to-morrow, or the day after?

"VERY."

THIS very small word is very often used in the English language when a sentence would be very much stronger and the meaning very much more forcible without it. If Dr. Dio Lewis, now that he has finished counting up the cost of a year's sneezing, would set himself to computing how much time, tongue and combustion of nerve cell are wasted out of a man's lifetime by needlessly speaking the word "very," the apostle of oatmeal would be again the benefactor of his race.

If a man has not much hair on the top of his head, it is not enough for people to say simply that he is bald, but he is very bald. A man is not stingy, but he is very stingy, when the one good strong word "stingy" would put the whole point forcibly. A doctor of divinity is not learned, but very learned; a doctor of medicine is not crotchety, he is very crotchety, while a lawyer is not cunning, but very cunning. In the same way, a young lady is not handsome, but very handsome. The qualifier has become so common that it is weakening to the word it is joined to. In nine cases out of ten where very is used to intensify human speech, a single bold word without the "very" would hit the meaning like a hammer, and drive it home with a directness unknown to clogged and hampered expression. Brutus does not say, "As Cæsar was very valiant I honor him; but as he was very ambitious, I slew him."

"Very" seems to be a word designed by

Providence for young ladies to express their feelings with. This portion of community probably could not get on without their adverb, but the English of the rest of the race would be strengthened if the little qualifier were relegated almost wholly to the fair class to whom it belongs. It creeps into our literature as insidiously as the measles into a family of fifteen, and once there, it stays like an office-seeker. It breaks out everywhere, even in the most high-toned and "cultivated" writing. A newspaper, which is authority on the art of literary composition, prints, for instance, a thrilling description of a brilliant party. Every lady present was very much this or that. Mrs. Blank, who was a very intimate friend of Mrs. General Dash, wore a very handsome green satin dress and had a very handsome silver comb in her back hair. Mrs. General Dash wore an exceedingly becoming dress, which was very elaborately made. Two young ladies, whose dresses were exceedingly becoming and very graceful, were accompanied by a young man who had a very light moustache. Everybody was either "very," or "exceedingly," or "extremely," or "most highly" something. The air bristled with superlatives.

It combines instruction with amusement to count the "verys" in a column of newspaper advertisements. A "general housework" applicant is not content with being a respectable woman and good cook. She is a very respectable woman and a very good cook. It is enough, in all conscience, to be said of a woman that she is a superior waitress. Superior itself means better than good, but this uncommon waitress tacks on the word "very," too, and thus becomes very better than good. Next, a "very honest and extraordinarily clean" chambermaid, "who is very careful about her work," wants a place. What a treasure to have in the house in these degenerate times, "a very honest and extraordinarily clean person, who is very careful about her work," would be. Then a "very capable young Scotch woman, who has the very best city references," wants a place. Of course, she is far superior to the girl who is only a capable young woman, with the best city references.

The climax of veriness is reached, however, by a girl. She is "a very competent cook, understands waiting at table in a very efficient manner, and is in all respects very first-class." "In all respects, very first-class qualifications" is good. It is only equaled by the young man who was a very perfect horseman and rode a very black horse. A fine example, too, of the redundant "very" is the reply of the old tar who was blown overboard at Trafalgar and rescued with much difficulty, and who, long afterwards, being asked by a sympathetic lady how he felt on that occasion, answered, "Wet, ma'am, very wet."—*Cincinnati Commercial.*

PRINCIPLES

APPLIED TO THE TEACHING OF MUSIC.

G. CAROTHERS.

THE value of principles is apparent to every earnest student. No conscientious teacher will fail to establish the minds of those under his instruction in the elements of the studies he proposes to teach. No educator, whatever his sphere of labor, unless he be very shallow, will presume to impart his knowledge of any subject without first thoroughly understanding the principles of the same.

And those who learn, whose duty is to study and follow the directions of their masters in intellectual hygienics, should in the same manner, first lay well the foundation before undertaking to build the superstructure. For it is universally admitted that unless the teacher and the taught co-operate to produce the best results in their office of imparting and receiving, no attainments of any consequence can follow.

While it is thus granted that in any department of learning the instruction should begin with certain principles which must be constantly applied by the pupil, music, which can and should be taught in the same way, unfortunately, is rarely taught or learned thus. There are several reasons for this, but two must suffice for our present purpose.

There is a class of so-called professors of music who know simply nothing of what they pretend to teach. With such pseudo-knowledge one can easily imagine that they give nothing to their pupils, nor do the pupils give any evidence of having learned anything. How general this may be we cannot say, but the writer receives persons every term who have taken "lessons" for three, six, eight months, and sometimes a year, and yet are most shamefully ignorant of the simplest elementary principles of piano and organ study, and voice culture; so that with regard to a part of this State, Eastern Pennsylvania, our assertion can be fully substantiated.

Again, there is a class of teachers who, though sufficiently well informed to be able to teach successfully, are careless and indifferent both as to their methods of instruction

and the ultimate good of their pupils. The influence of this class is perhaps more baneful than that of the first-mentioned, for in some respects it is more desirable to remain in ignorance of some branches of knowledge than to have only a smattering of them. *Apropos* of this an English writer says: "An investigation on this subject must some day come, which will prove that those pupils who have for years scrambled through pieces in imitation of the manner in which they heard them performed by their masters, are utterly ignorant of what key they are playing in, the value of notes and rests, the various species of time, the merest rudiments of phrasing, or the correct method of executing any of the various embellishments to be met with in the simplest composition." But to our second point.

The general lack of knowledge of the elementary principles of music is not alone due to the worthless work of the two classes of teachers just mentioned. Parents and guardians, and in many instances, the pupils themselves, are as much to be censured as the family instructor. Very often, and the exceptions are rare, pupils are too anxious to "get on," and "play pieces," and they are not unfrequently encouraged by a fond mother or admiring father, who wants Arthur or Angelina to "show off" before the relatives from the city, or perhaps on the other hand, "astonish" the branch of the family from *Weissnichtwo*. In Germany, when the music-master takes charge of a family of children, he is permitted to teach them as he wishes, regardless of time or expense; and his training is not interfered with by "suggestions" from any source whatever, as that of many American teachers generally is, even before the pupil has fairly understood his rudimentary work. Is there any remedy for these evils, as they may well be termed?

Passing these who simply degrade the profession, in the hope that they will some time cease to be patronized, let intelligent teachers first positively refuse to give a musical education to any one who is not willing to be taught in the same way that he or she would be taught the languages or mathematics; for music is a science as well as an art. This may seem a very radical position to assume, and though the time may never come when music shall be put upon such a basis, this is surely the first step that must be taken in order to elevate it to its proper standard. Moreover, let parents, guardians, and pupils throw aside the absurd notion that music can be learned in a few months, and that a knowledge of the principles is not essential. A knowledge of the principles, whether of piano or organ-playing, or of vocal culture, or any other branch of musical study, *is* absolutely necessary to satisfactory attainments, and *years* must be spent in learning even one of the branches of the "divine art:" and the time must come when this shall be realized more than it is now, if knowledge increases as we suppose it will, and civilization advances in consequence.

If these means be adopted, first a high standard by the intelligent teacher, who will under all circumstances adhere to the same; and, secondly, the cultivation of patience, and of satisfaction with small results for the first year or two, then we may begin to hope for better things.

Music is a language that speaks to the universal heart; it exalts, it calms; it kindles hope in the breast, it soothes the stricken soul; it calls forth all the powers to action; in a word, there is no thought or feeling it cannot express from the sublime creations of Beethoven, Handel, Haydn, and Mozart to the simple improvisation of some lowly mother as she hushes her child to sleep. Hence to be rightly understood and expressed, music must be studied from the simplest elementary forms up to the highest developments of both the science and the art; and we hope these simple suggestions, hurriedly thrown together amid the press of other duties, may do somewhat to promote the purpose which all earnest teachers are striving to accomplish.

WHY NOT SPEAK PROPERLY?

THE careless, slip-shod manner in which people who deem themselves educated use common English words in their every-day speech is scarcely short of amazing. If appearances deceive in any particular, it is certainly in this; for if we were to infer the degree of culture possessed by the men and women we meet daily from the character of their verbal expressions, we should set it, in most cases, at a point much below their claims. Every word in the English language has its peculiar significence and application, jnst as would be rationally thought, and the cross uses and false applications so common in ordinary parlance are totally unwarranted.

Society has fallen into a vicious habit in the use of terms, and it is time that a strong effort were made to eradicate it if we would preserve the English tongue in its purity and simplicity. The little volume, "The Right Word in the Right Place;" and Mr. R. G. White's larger book on "Words and their Uses," are excellent monitors for popular reading, and show clearly the errors we are constantly committing without a thought of their glaring absurdities.

"*Aggravate.* This word should never be employed in reference to persons, as it means merely to add weight to—to make evil more oppressive; injury is aggravated by insult. It is sometimes improperly used

in the sense of irritate, as 'I was much aggravated by his conduct.'

"*Balance*, in the sense of rest, remainder, residue remnant, is an abomination. Balance is the difference between two sides of an account—the amount which is necessary to make one equal to the other.....Yet we continually hear of the balance of this or that thing; even the balance of a congregation—of an army.

"*Bountiful* is applicable only to persons. A giver may be bountiful, but his gift can not—it should be called plentiful, or large. 'A bountiful slice' is absurd.

"*Fetch* expresses a double motion; first from and then toward the speaker. It is exactly equivalent to 'go and bring,' and ought not to be used in the sense of bring alone.

"*Calculate*, besides its sectional misuse for think, or suppose, or suspect, is sometimes in the participle form—calculated—put for likely, or apt: 'That nomination is calculated to injure the party.' It is calculated (designed) to do no such thing, though it may be likely to.

"*Couple* applies to two things which are bound together or united in some way. 'A couple of apples' is incorrect; two apples is meant.

"*Dirt* means filth, and is not synonymous with earth or soil. Yet people sometimes speak of a dirt road, or of packing dirt around the roots of trees they are setting. They mean *earth*.

"*Expect* looks always to the future. You cannot expect that anything has happened or is happening, but only that it will happen.

"*Get* means to obtain, not to possess. 'He has got all the numbers of the *Christian Instructor*.' 'Have you got good molasses?' 'They have got bad manners.' Why will people persist in introducing the word in such sentences as these, where it is so evidently superfluous?

"*Help meet*. An abusive use of these two words as if they, together, were the name of one thing—a wife—is too common. The sentence in Genesis is: 'I will make him a help meet for him;' that is, a help fit for him. There is no such word as helpmeet.

"*Lie—Lay*. Persons not grossly ignorant sometimes say they will lay (meaning lie) down, that they have laid (lain) an hour, or that the hammer is laying (lying) by the tacks. Lie means to recline; its past tense lay—'I lay there all night;' its participles, lying and lain. Lay (used of present time) means to put something down—one lays a carpet; its past is laid—'I was interrupted while laying it, and it was not laid until night.'

"*Love* rules the heart not the stomach. You love your wife, or ought to; but favorite articles of food you *like*.

"*Observe* should not be used for say, as in the oft-heard sentence: 'What did you observe?'

"*Sit*, often mispronounced set, is occasionally written so; but it is to be hoped rarely."

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, JUNE, 1878.

J. P. WICKERSHAM. . . . . J. P. M'CASKEY.

THE programme of the meeting of State Teachers' Association, to be held at Reading in August next, will be found in our next issue. The attendance of teachers will be large, the place selected for the annual session is a good one, and Dr. Hays, President of Washington and Jefferson College, is chairman of the executive committee.

THE present (June) issue of *The School Journal* completes our Twenty-sixth Volume. We are grateful for the continued patronage of Teachers and Directors. Shall we not have prompt renewal of subscription from all our old friends for the Twenty-seventh Volume which begins with the July number? There is room for many new names also upon our mailing lists. School Boards are a most important part of the machinery of the system. It is under their administration that the schools of the district advance to better things or retrograde. *The School Journal* comes monthly with something of suggestion, advice, or information, here awakening interest and there stirring enthusiasm It is sent officially to the Secretary of the Board of each school district in the State, and it may be ordered by each School Board to be sent to all of its members. This is wise policy, for no conscientious Director can read its pages month by month without benefit to the schools under his care far beyond the cost of subscription to the district. The best districts in the State keep the names of their directors always upon *The Journal* mailing lists. They properly regard it an efficient agency in promoting the excellence of their schools, and hence place it on the list of necessary school supplies.

OUR Minister to Japan sends the State Department several dispatches, showing Japanese progress in modern civilization. The third annual report of the Ministry of Education, for 1875, shows that in a population of 34,000,000, there were 24,275 schools, having 44,000 teachers, and an attendance of 1,926,000 pupils, only one-fourth of whom were girls. The income of the public-school

fund, for the same year, was $6,238,096, including $1,140,000 of voluntary contributions, and the expenditures were only $4,210-493. An agricultural college with a staff of foreign teachers, was opened at Tokio, by the Mikado, on the 24th of January last, and, to crown all, "the telephone has been introduced into practical use under direction of the Japanese Government."

THE Grand Duchess of Baden, the only daughter of the Emperor of Germany, is a woman of admirable good sense. She has placed her young daughter. in the excellent girls' school in the Schloss at Carlsruhe, where she is proceeding step for step with her young companions, and teachers and play-fellows have been alike charged not to distinguish her by any of the high and exceptional titles she may bear in after-life. She is to work and play, run and wrestle, give and take, on perfectly equal terms with all her companions, and to receive exactly the same punishments if she is remiss in study, sewing, knitting, or any other occupation of an ordinary scholar. The Grand Duchess is credited as expressing a wish that the child may be made as thorough a seamstress as if she were expecting to earn a livelihood by her needle.

IN 1875, some eighty Indians, belonging to various tribes in the Indian Territory, were taken from Fort Sill in said Territory, to Fort Marion, at St. Augustine, Florida, there to be kept as prisoners. These were dirty, greasy, and unkempt savages, wearing the chains of prisoners, and proud of their war paint of the plains. Some worthy ladies of St. Augustine became interested in them, and under the kind treatment which has been shown, and the intelligent instruction they have received, they have become well-mannered soldiers in outward appearance, and the minds of many have been awakened to some sense of moral and religious obligation. It is believed that their life in Florida will be a starting point for many of them to better things on returning to their hunting grounds in the Far West. The old men do not care to attend the school which the ladies have opened, but the younger prisoners have become enthusiastic in their primary studies. So encouraging, indeed, has been the result of this primary teaching, that benevolent persons have generously contributed money for the good work; and this spring, says *Harper's Weekly*, "at least ten of these Indians are to begin their studies at educational institutions in the North."

IN Philadelphia the City Councils control all appropriations for schools, which is unfortunate for the school interests of this great city. The school tax should be assessed, collected, and disbursed by the Board of Controllers wholly independent of Councils or any other authority save the people themselves. Were this the case the schools of Philadelphia would now be under thorough supervision, insuring improved courses of study, better methods of teaching, more prompt payment of cash obligations, and in every way a more healthy condition of the school system. The following paragraph is from a recent issue of one of the city dailies:

The Secretary of the Board of Education yesterday commenced the distribution of warrants amounting to $328,326.95. Of this amount $14,230 was paid on account of night schools, $10,264 on account of ground rents, and about $300,000 on account of salaries to teachers and other employees of the Board. The latter sum represents three months' salary due the female teachers on April 1st, and four months' salary due the male teachers and other employees of the Board on the 1st instant. The explanation of this large payment is in the fact that Councils failed to make an appropriation for this year's expenses of the School Board until last month, the time intervening between the passage of the bill and the present being almost entirely consumed in ascertaining the amounts due employees under the reductions made in salaries by Councils, and in making out the warrants. The warrants are being cashed as fast as possible at the City Treasurer's Office, which was crowded all day yesterday.

HARD work must be done by the growing student, and plenty of it, if he would acquire toughness of mental fibre. We have little faith in the pap-spoon theory of education, and still less in the dry husks of the rote system of mere question and answer. But toil may be made glad when interest is aroused and thought is active, and it is by such toil only that the most important results are achieved. It is the business of parent and teacher to arouse this interest by presenting the subject, whatever it may be, in an intelligent and attractive manner. He should not *do* the work for the child, but should aid him in doing it until the strength of the latter is such that he can move on of himself, awakened, resolute, and self-reliant. The following paragraph will indicate, to the parent at least, how such aid may be wisely given to the little ones.

"I have seen one ten-year-old boy get what seemed to me 'quite a clear vision of the course of leading events in our country during the last two hundred years,' without any 'memorizing,' and with only one careful, though often interrupted, reading of the 'Young Folks' History of the United States,' read aloud by myself. I have seen the same child's de-

light at the age of five, in Mrs. Agassiz's 'First Lesson in Natural History,' and a year later, how fast he gained a knowledge of physiology from my reading aloud, a little at a time, that capital book, 'History of a Mouthful of Bread.' I have seen how he picked up for himself, without book or teacher, the names of all the forest and ornamental trees he came across. Then I know, too, how the Swede and German children, among whom I have lived in the West, learn to speak two languages, quite correctly when very young. More than all this, I have seen how almost all the children are starved and stunted mentally, because we parents are too ignorant or too busy with other things to give them answers to their questions, and to surround them with conditions favorable to healthy mental growth."

MR. GLADSTONE, speaking for the House of Commons at a recent public dinner, pronounced the House of Commons "a school of extraordinary power and efficacy"—in morals and manners as well as intellect. It is a school for temper—for a man who goes astray in that respect finds out his mistake in five minutes. It is a school of patience, of honor, of justice. The same remarks apply in part to Congress, albeit there, as well as in Parliament, are many pupils slow to learn and slower to practice what they know. Mr. Gladstone remarks that he has been longer in the House of Commons than any man except Lord Palmerston. "For the sake of this country," says *The Ledger*, "it is to be hoped that the pupils in Washington, who have most personal need of as long a training as Mr. Gladstone, may not get it. They had better be discharged as incorrigible, for their tuition is entirely too expensive."

UNDER the title of "The Place of Must in Teaching," the *Sunday School Times* puts the case as follows. It is an eminently common-sense view of a most important matter:

With all the improvements in methods of dealing with children—and these improvements are many and great—it is important to bear in mind that judicious *discipline* has an important part in the wise training of the youug. Formerly, discipline was the great feature—if not, indeed, the only feature in the training of children. But this is in the long past. For a century, or more, the progress of interest in and attention to the children has been steady and rapid.

Now that this state of things, is, on the whole, a decided improvement over that which it displaced, we do not have a doubt. Yet there is always a danger of losing sight of one important truth in the effort to give new and due prominence to another. Children need to learn how to do things which they do not want to do, when those things ought to be done. Older people have to do a great many things from a sense of duty. Unless children are trained to recognize duty as more binding than inclination, they will suffer for all their lives through from their lack of discipline in this direction.

It is already seriously questioned by competent teachers whether the kindergarten system is to meet every necessity of childhood training in study. There must be a place for tasks as tasks, for times of study under the pressure of stern duty in the effort to train the young to do their right work properly. It is not enough to have children learn only lessons which they enjoy, and this at times and by methods which are peculiarly pleasing to them. President Porter has said, in substance, that the chief advantage of the college curriculum is, not that it trains a young man to do what he does like to do, but because at a time when he would not wish to do it, he *must* do it, and do it just then. Any course of training for a young person that fails to accomplish thus much, is part of a sadly imperfect system.

There is little danger that intelligent parents or teachers will at this day refuse to duly consider a child's tastes and peculiarities, in their effort to instruct and train him. While, however, they are making study attractive and life enjoyable to a child, let them see to it that he learns to keep still at specified times, to study assigned lessons, to do set tasks, to deny himself craved indulgences, to go and come at designated hours, not because he wants to but because he *must*. "It is good for a man that he bear the yoke in his youth."

Two school girls from Ohio met again in Philadelphia last week, after the interval of years, in which each had arrived at especial distinction. One was Mrs. Hayes who was received at the Woman's Medical College by the other, who was her former school-fellow, now Professor of Chemistry and Dean of the Faculty, Miss Rachael Bodley. From this it may easily be understood that there was a special interest in the welcome which the Woman's College extended to the wife of the President, and which was fully expressed in Miss Bodley's graceful introduction of Mrs. Hayes to the Faculty and pupils. Mrs. Hayes, as Lucy Webb, was a graduate of the Wesleyan College, the first chartered college for the education of women in the United States, so that her school-fellow might well say in presenting the students and alumnæ of the Woman's College:

Your visit affords us each, personally, great pleasure, but still greater pleasure viewed as an expression of the interest you feel in the higher education of women. The problem of the professional education of women is being wrought out successfully in our commodious college building, which you have just inspected, and in the adjoining hospital, and we rejoice that you and the distinguished ladies of your party are witnesses of the same to-day.

THE article on "Manners, the Minor Morals" which appeared in our last issue should have been credited to the *National Teachers' Monthly*. This excellent journal, which is one of our best exchanges, is edited by our old friend, Prof. Jerome Allen, of Geneseo, New York.

THE Fourteenth Annual Convention of the Pennsylvania State Sabbath-school Association, will be held in the Pine street Methodist church, in Williamsport, Pa., at 3:30 P. M., Tuesday, continuing through Wednesday and Thursday, June 11, 12 and 13, 1878. A working programme of practical questions has been prepared. The questions will be opened by eminent Sabbath-school workers, after which ample time will be given for their discussion by the Convention. This will be a mass convention, and every Sabbath-school and Sabbath-school organization in the State is entitled to representation. The leading railroads throughout the State connecting with and centering at Williamsport have granted reduced rates of fare, tickets good from June 10th to 12th, to start, and good to return until June 18th, which will give all who desire, after the adjournment of the convention, an opportunity to extend their trip to Watkin's Glen, oil regions, or other near-by famous resorts. Williamsport extends a hearty welcome to all friends of the Sabbath-schools throughout the State. Entertainment and railroad information and orders will be furnished all who notify Rev. Thomas E. Clapp, Williamsport, before June 5th. For further information in regard to the programme address Ed. S. Wagoner, State Secretary, Mechanicsburg, Pa.

WE clip the following from an editorial in the *Mountain Beacon*, Hazleton, Luzerne county, Pa.:

While the school laws of Pennsylvania are regarded on the whole as eminently wise in their provisions, they are merely human enactments, and their further improvement is not only possible but desirable. Hon. J. P. Wickersham, Supt. of Public Instruction, has from time to time advised changes such as time and experience suggested; and while it is the duty of the press to second his efforts when in the right direction, as these efforts usually are, this eminent educator himself is ready and anxious to hear suggestions from the people, when such suggestions arise from a close and intelligent observation of the working of the system, and an honest desire to advance the cause of popular education.

We have heard men of ripe judgment, of business tact, and of large experience in school matters, urge such improvements as the following, which we present for public consideration, without comment further than to say that those familiar with the working of the system in populous and wealthy districts must see the propriety of such provisions:

1. Making it unlawful for any member of a school board to receive pay for any office he may hold or any duty he may perform pertaining to the business affairs of such board.

2. Preventing any member of a school board from becoming a bondsman or surety for any one acting as treasurer, secretary, or collector, for the school board, or for any work done for, or contract for supplies of any kind furnished the school district.

3. Making it possible for the school board to employ some competent person not a member to act as secretary or district superintendent, at a salary to be fixed by the board.

4. Preventing any one from being eligible to the office of school director, or from voting for school director, who has not paid a school tax within the State within the last year.

THE present postage law needs revision to simplify its workings. Why should it cost *four times as much* to send *The Journal* through the post-office to subscribers in Lancaster, where it is published, as to send it to parties subscribing in San Francisco—it being delivered by letter-carriers in both cities? The rate is three cents per pound to San Francisco on matter prepaid to subscribers, but we must pay under the present law *two cents per copy* on each and every copy mailed to subscribers in Lancaster! Again, why should the law discriminate in favor of political matter (newspapers) in the United States mail-bags and against literary and educational matter,—charging the former *two* cents per pound to subscribers and the latter *three* cents per pound, all being periodical printed matter and neither requiring more care or attention in the mails than the other! What we think the law should provide is this:

1. Uniformity of rate on all newspaper and periodical publications, which are authorized to be sent at pound rates.

2. Uniformity of rate at all post-offices.

3. Uniformity of rate for all copies of newspapers and periodicals, mailed by the publisher from the office of publication, whether to subscribers or as sample copies.

CHEAP literature—good in quality but low in price—is a boon to the masses. The priceless treasure of the world's best thought has become the heritage of the race, and the "heir of all the ages," should prove himself worthy so rich an inheritance. Is he doing this? It is true that the books which are best sell largely; but those which sell most largely are not of the best. Old and young alike—but especially the latter—pore over the sensational, the tawdry, the cheap. But to this low depth there is yet a "lower deep." An article from a distinguished College professor which is inserted in this number of *The Journal* will be suggestive to teachers and parents. Of the worst class of these books a cotemporary says with all the force of solemn truth:

It is a lamentable fact that there is a tainted stream of literature flowing through the land, poisoning those who drink of it, destroying purity, stirring up passion,

posening the bonds of honor and integrity, sullying innocence, and paving the way to destruction for young and unsuspecting feet. Surely it concerns every one to do something toward the banishment of such a deadly and noxious element from our midst. No pains would be thought too great, no measures too strong, to destroy a venomous serpent that was striking deep its poisonous sting among our children. Yet this impure literature carries with it a venom more deadly and irradicable than that of the serpent; it poisons heart, character, and life.

ELECTION OF SUPERINTENDENTS.

THE election of school superintendents in the several counties, cities, and boroughs throughout the state took place on Tuesday, May 7th. The returns have been nearly all received, and the officers elected will be found under the proper official head. Of the eighty-eight officers chosen, fifty-two were re-elected and are familiar with the duties of the office.

Among those electedfor the first time we notice a number of the names of leading teachers, but we shall greatly miss such efficient superintendents as Gregory, of Clearfield; Graham, of Crawford; Baker, of Delaware; McNeal, of Huntingdon; Garman, of Juniata; Aiken, of Lawrence; Wright, of Perry; Allen, of Potter; Tilden, of Susquehanna; Buffington, of Washington, and others. On the whole, however, judging from what we know of the men to be commissioned in June next, they will form a body of the best qualified officers that have ever had in charge the schools of Pennsylvania; and there seems to be no good reason why the cause of popular education among us should not prosper more during the next three years than ever before.

Some ten days before the election the Legislature passed an act fixing the salaries of county superintendents. The act does not apply to the salaries of superintendents of cities and boroughs. The act, with certain provisos, fixes the salaries at $4.50 for each school. The aggregate amount of money appropriated is something over $4000 more than was paid the retiring superintendents. This is but a trifle, probably a smaller increase than would have been voted by the conventions of directors had they been allowed to fix the salaries as heretofore. But even this increase was not contemplated by the original bill, and did not exist in the bill as it passed the House of Representatives. It was brought about by certain amendments that were adopted by the Senate and finally concurred in by the House. As it is, the bill will do much to give efficiency to the office. Good fruits have already grown out of it, and we have as yet had insufficient time to realize its chief benefits. Several counties added to the salaries of their superintendents, as fixed by the act, amounts out of their own appropriations. Among them, Allegheny, Elk, Schuylkill and Venango. These additions have been judiciously made except, perhaps, in Elk, where the $400 added will materially diminish the small school fund of the county.

The bill fixing the salaries of Superintendents met with considerable opposition in its passage through the Legislature, and was amended in many ways; but one thing was remarkable, not a single word was said by any one against the superintendency itself. That is now firmly established as a part of our system of public instruction, and the work of the future is from year to year to render it more effective in the elevation of our teachers and the improvement of our schools.

It was understood by the Legislature that in fixing the salaries of the Superintendents compensation was provided for the whole time of the superintendent. It was not intended that he should spend the greater part of his time in a store, shop or school, or on a farm, and look after his schools between whiles; but it was meant that the interest of education given him in charge should enlist all his time, talent and energy.

REAL SCHOOL "DIRECTION."

A SMALL English book on "School Inspection," by Mr. D. R. Fearon, gives the results of ten years' experience as School Inspector and Examiner in England. The recent rapid strides made towards popular education in England are due not only to the action of the Government in providing school houses and teachers for a large number of pupils, but also largely to the fact that a thorough system of inspection and examination has been established and put in successful operation by men of very great learning. The English Universities have found for their foremost scholars abundant and useful employment in the business of minute, thorough and repeated supervision of the public schools, from those of the most elementary character up to such as rank with some of our colleges. Indeed, the literature of "pedagogy," or the art of teaching, has few more valuable contributions than the exhaustive reports made by the English Inspectors of schools sent to Germany, France, the United States, and elsewhere, to study the systems of these countries. From the careful examination made by such men as Matthew Ar-

nold, Bishop Frazer and their colleagues, we can get a better knowledge of the advantages and disadvantages of our system as compared to that of other countries, than by mere comparison of statistics or a dry resume of official reports.

In England the pay of teachers is largely regulated by the results of their teaching, and a careful system of examination, tabulated and inspected, is in use, in order to secure the best of the work of the scholars. Then, too, "pupil teachers" are largely employed as assistants, and the examination is intended to ascertain their fitness for certificates, upon which future appointments or promotion must depend in the main. There can be little doubt that a change in the system in force here, that would connect with the local board of volunteer unpaid directors, a well-trained inspector in each school district, would be, in the end, economical and advantageous; but, in the meantime, it would be well for teachers and school directors to see how minutely and thoroughly examination is carried on in other schools, and how entirely the business of teaching is separated from that of inspection. Here practically the whole responsibility is put upon the teacher, and school directors and parents find little occasion to regret that it is in such good hands, yet teachers and scholars both need the impulse of external pressure, and would be the better for a frequent interposition of a well trained superior, who could make an impartial test of progress and give a report such as would show the advantages as well as the imperfections of existing methods of instruction, and point out requisite changes in text-books and subjects, to bring both up to the best standard.

SCHOOL SAVINGS BANKS.

ONE of the most important lessons we can teach our youth is that of economy, so closely allied to a manly spirit of independence. Individually and as a nation we need more sharply defined conceptions of the grave distinction between *meum* and *tuum*. We need a keener sense of personal honor in matters of trust. Extravagance run riot in ten thousand directions has lured men on to the precipice of dishonesty over which they have toppled to ruin. We must preach again the old gospel of economy, as taught by "the fathers" if we would correct these evils in the coming generation. Pupils in the schools everywhere should be taught the manliness of self-denial, the importance of acquiring habits of economy in youth, and we see no better way to make this matter of practical benefit to the young than through the institution of Penny Savings Banks properly managed.

Such banks have been in operation in England and on the Continent, in connection with schools, for a number of years, and those who have examined their workings report most favorably upon the habits of thrift acquired and the spirit of industry awakened. These banks can and should be made a permanent feature of very many of the schools in Pennsylvania. The first to take the initiative in this country, so far as we know, was the Boys' High School of Lancaster, Pa. The books to depositors—with the words "High School Savings Fund" printed on the back—were issued Oct. 1, 1877, the teachers announcing the conditions under which deposits would be received, and one of them, Mr. Jas. C. Gable, a responsible gentleman, acting as treasurer of the fund. Each depositor has his bank book, and deposits ranging from one cent upwards may be made at all proper times when the school is open. Interest at the rate of six per cent. per annum is allowed on all deposits, which is computed and credited monthly, thus keeping before the boys the idea that they are modest capitalists, and encouraging them to save their money and increase the amount of their deposits. The money deposited is held subject to the call of the pupil on leaving school or on some very urgent necessity. Pupils are not at liberty to draw out money at pleasure, as one of the objects of the fund is to have the youthful depositor feel that he is *saving* his money, and that the growing fund may be a nucleus around which other sums, smaller and larger, may be gathered after he has ceased his connection with the school.

The teachers are personally responsible for the fund and are enabled to pay interest on the money deposited by investing it in a carefully-managed building and loan association, which is peculiarly adapted for this kind of investment, as the amounts received may be invested almost as soon as they are deposited. The depositors here number more than half of the pupils and the amount on deposit has, at this time, reached the creditable sum of $235, much of which would have been spent foolishly had this means of saving not been suggested.

It is not, however, in the mere saving of money that the teachers look for the best results from the fund, but in the fostering of habits of economy, in avoiding the loose

waste of pocket-money for sweetmeats, for tobacco, and, it may be, for drink, as boys grow carelessly on towards manhood. The invaluable habits of temperance and self-control may thus be encouraged, and that spirit of independent self-reliance strengthened which is an essential element in every manly character. We have strong hopes that this system of penny banks will grow when once it has fairly taken root in our American soil, and that it will do much good. Try it, teachers of Pennsylvania.

An article found elsewhere in this issue, will prove interesting to such teachers as may wish to know how these school funds are managed beyond the sea.

STUDY OF NATURAL HISTORY.

CONSIDERED AS A MEANS OF AROUSING PENNSYLVANIA.

SCHILLER, the great German poet, says, somewhere in his philosophical writings, that to a finely-organized mind, there is a peculiar charm in a natural object, viewed as such, which nothing artificial, however beautiful, ever excites. And Emerson, whom the Countess D'Ossoli called the intellectual father of his country, says that one is not in a right frame of mind if he cannot sit down by the wayside and enjoy with wonder, the pebble he finds at his feet.

We have long been convinced, and this through abundant personal experience, that there is no other study capable of arousing so *universal* an interest in a school, so certain, we had almost said, to excite to a healthy activity even dull and sluggish intellects, as that of Natural History; and among the various departments of this branch of science, Botany is undoubtedly the most eligible, since the objects which it includes are vastly more numerous, and everywhere more accessible than those of any other.

We cannot help but regard it as a misfortune that so few of the teachers in our common schools—despite the scientific training that many of them have had in Normal and other schools—have any but the most superficial knowledge of this fascinating science, since even those of our towns and villages have ample means of teaching it thoroughly, and those who are employed in the rural districts find everything necessary to the prosecution of the study itself, and its subsequent introduction into their schools, ready at hand.

But even in the so-called select schools where Botany is ostensibly one of the regular studies, the botanical "course," generally speaking, consists of little more than the collection of a dozen or two of the commonest plants, labeling them and placing them in a herbarium; and very often even this paltry result is attained solely by finding the common names, and then, through the index, finding the scientific ones, neither the teacher nor pupil being able to reach the result through anything like a scientific process. The result of this sort of work is simply to puff up the unfortunate pupil with self-conceit, to cheat silly parents, and to excite the stupid wonder of the ignorant. A certain State Superintendent many years ago, in his annual report, asserted that, having been asked to examine in this science, the young ladies of a famous "finishing school," he found them marvelously proficient in the facts presented in the text-book in use in the seminary, proficient, that is as a matter of mere theory, but that when he asked the class whether the trees which shaded the windows of the school-room belonged to the Phœnogamia or the Cryptogamia, not one of the "students" could answer his question. Of what value is such memorizing from the text-book?

The study of Botany, like all other studies, should be made thoroughly practical. Unless this is done, the time and money spent upon it will be well-nigh thrown away. We venture, even in opposition to so high an authority as Gray (and with him, so far as we know, all other botanical writers agree), to recommend autumn as the season for beginning this study. And for the apparent presumption of offering such a suggestion, we are, of course, bound to offer something which we, at least, regard as a sufficient reason. It is this: Autumn is pre-eminently the season when the ovaries of plants are fully developed and ripe. Now the beginner very soon finds that his greatest difficulty in analyzing plants occurs in the various parts of the seed vessels. If the teacher, therefore, will employ his newly-organized class in collecting seed-vessels of all kinds and will store them away for fall and winter use, a most necessary preparatory training can be conducted within doors, during the inclement season, and, as we have always found, to the great delight of the class, especially if the object of the thing is clearly explained; and then at the opening of the spring he will have a class prepared for the practical work of analysis in a way attainable by no other method. Of course we do not wish to be un-

derstood to say that nothing can be done in investigating the anatomy and physiology of plants except in the fall; we merely assert, that for the reasons given above, that is very much the best season. We have verified this theory (to us no longer such), within a year of this time, accomplishing results most satisfactory to all parties concerned.

We will not here enlarge on this study as one of the most admirable means for encouraging habits of close and accurate observation, of developing a capacity for generalization, encouraging self-reliance and fostering æsthetic tastes. But the intelligent teacher who tests the matter, will find that these results, so essential in everything like a real education, are, as a whole, attainable, through the means here pointed out, to a degree of thoroughness and perfection, not to be compassed by teaching any other branch of science. We are fully convinced that it will eventually be acknowledged that the practical study of natural history, is the most efficient means of elevating Pennsylvania to that high rank among the commonwealths which constitute this country, which her most enlightened founder intended she should occupy. Among those means for reaching the noble end he had in view, not the least was the practical and scientific study of Nature.

THE FRENCH EXPOSITION.

THE Paris Exposition opened May 1st, and some account of the dimensions of the buildings and of the Champ de Mars may assist the estimate of its outward appearance. Perhaps it is no small flattery to Philadelphia pride to be told by Mr. Smalley, the *Tribune's* correspondent, that comparison is out of the question. The Champ de Mars is the classic review ground of France, on the east bank of the Seine, where the French King, Legislature, Nation and all, swore dramatic allegiance, in 1790, to the new Constitution of France. It is the "field of war" where many a display has since been held in the shifting pageantry of national rulers. In English measure its dimensions are about 3250 by 1625 feet. The buildings are two long parallelograms, measuring some 2000 by 500 feet, their intervening space being filled in by galleries and buildings for the Fine Art display, the pavilion of the city of Paris occupying the central space of all. Outside of the parallelograms, and filling in that part of the enclosure of the Champ de Mars are extra galleries for machinery and separate annexes. It will be seen at once that the classic field of Mars is nearly covered and out of sight, and that no comparison is possible between it and the many-acred Park of the Philadelphia Exhibition, so that it is with the inside of the buildings that the criticism must deal. Of the two large buildings France occupies one, and about one half of the intervening Fine Art Buildings. The remaining parallelogram is the Foreign Section. The interior arrangements, it is said, sacrifice picturesqueness to business purposes, and the French plans for system and detail, in separating many of the compartments solidly from their neighbors, makes an extended view of the halls impossible. Space for the exhibitors appears to be utilized at disregard of general interior effect.

The uncovered space of the Champ de Mars is laid out in grounds and the smaller edifices of the Exposition are scattered here and there. Across the river by the bridge of Jena, the mound or hill of the Trocadero is reached, which overlooks Paris, and is crowned with a Pavilion Palace, where concerts, festivals and gatherings are to be held, a sort of "Judges' Hall," it is to be supposed, on a grand scale. This will cost eight millions of francs ($1,600,000), of which the City of Paris pays six hundred thousand dollars. The group of buildings in the Champ de Mars, it is elsewhere estimated, will cost twenty millions of francs ($4,000,000). This does not include the expenses for interior furnishing. The motive force for machinery, the chimneys, piping, &c., are set down at 920,000 francs ($184,000). The sum of $60,000 has been expended in gardens, grottoes, lakes, &c. The distribution of water through the whole Exposition costs $200,000. The monumental cascade of Trocadero cost $136,400; the aquarium $35,200. The Algerine palace, in which France sets forth the treasures of her chief colony, cost $40,000. The pavilion of the city of Paris is sit down at $93,000. This, it is said, will contain models, maps, paintings and photographs, illustrative of the municipality, each model accompanied by statistics giving the cost of each work, the whole recalling, though on a much more magnificent scale, the pavilion at Philadelphia which illustrated the public works of France.

It is said that the workmen of Paris are to have a "collective exhibition" just outside of the Fair grounds, and that they are putting up a handsome edifice, for which purpose the Department of the Seine has voted them a grant of seventy thousand francs. Mr.

Edward King, who gives these details in a letter to the Cincinnati *Commercial*, states that these various industries would have exhibited on the Champ de Mars had not the rules forbidden collective exhibitions within the grand central one. The bronze workers, the flower makers, the jewelers, the chasers, the enamelers, masons, engravers, decorators, "artists in hair," and hundreds of other specialists, will send their chief works to this display, which will be among the most interesting in the Exposition.

We have as yet seen no extended description of the extent or plan of the educational department, but with Dr. S. P. May to organize the Ontario exhibit, and Jno. T. Philbrick that of the United States, we can be assured of a creditable showing for the New World.

PUBLIC SCHOOLS IN LONDON.

THE work doing in London attracts attention from all educational centres. With its population of three and a half millions, making it the world's metropolis, it has only lately taken in hand the question of its public schools. In 1870 it was stated that there were 150,000 children of the proper age excluded for want of room in the existing schools. The School Board determined to remedy this by erecting school houses for 112,000 pupils; a thorough list was made of the number in each school district in want of school facilities, and measures taken to supply them. Of course, there were legal difficulties and the opposing interests of existing schools to be overcome and reconciled, and this done, there were 134 school houses ordered in different parts of London. By September of 1874, there were 65 new schools opened for 61,985 pupils, 35 more under way for 26,736 children, and sites designated for 34 school houses to accommodate 20,207 more, in all 134 school buildings for 108,930 children. The cost of the sixty-five school houses was less than fifty dollars per pupil. The school rooms were fitted up for classes of 50, 60, 70 and 80 scholars, and the school houses planned so that there would be six with 250 children, twenty-five with 500, twenty-five with 750, forty-three with 1000, thirty-two with 1250, and three with 1500. The School Board also took charge of eighty-four old schools, with 24,000 pupils, with room for 15,000 more, and these school houses were used by day for children, in the evening for adults for instruction in science and the mechanic arts. The old government of these schools was kept up as far as possible, but it was subordinate to the control of the School Board, whose inspectors made frequent visits and also held the annual general examination, which is prescribed with great minuteness of detail by law.

These schools have 243 male and 341 female teachers holding certificates, 791 pupil teachers, and about 500 on trial. The list of children attending them showed 79,700 on the rolls, room for 75,275, but an average attendance of only 58,507; but as this was partly due to the strict system of noting as absent all who did not answer to the roll-call on opening, measures were taken that reduced the number of absentees, total or partial, at least one-half, and the visitors appointed by the Board worked with such energy that the number registered was increased from 208,520, to 343,102, and that of average attendance from 171,769 to 256,391. Although competition is specially favored in all English legislation, the School Board received each year for four successive years an average of 79,000 pupils, and not one private school was opened.

The children in these schools in London pay, and 15,000 of the scholars that had formerly gone to schools provided for the poor free of cost now pay every Monday their penny. The School Board receives from 28,000 children one penny weekly, from 48,000 two pence and three pence, from 3000 four pence, and from 1000 six pence. Of 1325 families who stopped their payments, 500 recommenced, and 558 children were exempt on account of their extreme poverty. The opposition to payment came from the small dealers and from the country people, who used to turn an honest penny by the labor of their children, and did not like losing this at the same time that they were obliged to send their children to school and to pay for their instruction. The law of compulsory attendance was enforced by the aid of visitors, whose best labor was in securing a large voluntary increase and in making the public schools deservedly popular.

The London School Board exercises its supervision over private schools, and with such effect that, in 1875, there were 85,000 pupils in them under their regulations, with a marked improvement in all respects. It has a limited power over the children left to run wild in the streets, and it has put over three thousand of them at industrial Schools or on Training Ships. With all its outlays, the cost, which was established at sixpence on the pound in

1870, was found, after three years, to be less than a half-penny per year, including current expenses, interest on loans for the purchase of property, and building, &c. The money was borrowed at three-and-a-half per cent. for fifty years, so that the generations yet to come, who are to be principally benefited by these reforms, will also share in the expense, and in 1922, when the debt will be finally paid off, there will certainly be some substantial reward due the authors of the system of popular education, inaugurated in London in 1870. The School Board still has a great work to do, for there are still 190,000 children either abandoned by their parents and given to mere vagabondage, or badly taught in inferior schools. The plan is to increase by 7000 annually the list of their pupils, and to build ten new school-houses every year to house then properly. The great merit of the London School Board is that it has carried its system into effect so thoroughly and so well that there has been little real difficulty in applying the law under which it exists, and in enforcing its provisions so as to secure the support of the vast population living under it, and its schools are filled with the children without distinction of fortune or position, while they are opened to those who hitherto were condemned to grow up in ignorance or vice.

GERMAN UNIVERSITIES.

THE New York *Herald* published, not long since, an exceedingly interesting letter describing life in the great University of Leipsic. The first part of this letter is given below:

The German word for university lecture is *vorlesung*—that is reading aloud. One doesn't ask a friend whose lectures he attends, but whom he "hears." And perhaps the answer will be, "I hear Professor So and So, who 'reads' about Old Egyptian Grammar for Beginners," to quote from the list of lectures. It is by means of the lecture that the great body of instruction in the university is given, and that its tone and fame reach the outer world. In general terms it would be natural to say that university lectures will cease next week for the Christmas holidays. But there is an important and interesting element in the mode of German university instruction which is often overlooked amid the more striking and prominent effects of the lecture. This is perhaps the only thing which you will not find in Hart's "German Universities," a book that wears as well among the institutions it describes as when read at home. This feature is twofold, including what is called a *seminar* and *ubungen*. I can perhaps define these terms in no better way than to describe what they represent.

Professor Lipsius, who is in the department of old classical philology and literature, holds a *seminar* two hours each week during the semester for discussion of the "Dialogus" of Tacitus. Besides regular lectures, he also conducts a *seminar* for investigation in Russian. I lately attended one of the former at the invitation of a friend. In one of the smaller lecture rooms were assembled perhaps forty student visitors. Before the desk was a long table, around which sat a dozen more. They had a thoughtful air, as if weighty questions were about to come up for judgment. These were the members of the *seminar* waiting for their chief, who was to occupy the seat of honor. This chair was larger than the others—not to accommodate the portly professorial person, but as a distinction. The members were men who had obtained the privilege of discussing Tacitus with him and of receiving personal instruction, by means of introduction or other credentials of proficiency and industry. To while away the time I counted the number of spectacles and eye-glasses worn by the visitors; out of thirty-five, eighteen wore some sort of ocular helps. This proportion would doubtless hold good among Germans generally, and it is said to be due to the niceties of the German text, which try the eyes severely.

The professor soon came, and upon his arrival one of the two men who had volunteered to present an original paper on that day, read a portion of the text of Tacitus and then proceeded to give critical views founded upon a study of various readings. He read a portion of his paper, all of which was in Latin. His first point was no sooner before the meeting than the professor began a savage attack upon him. In elegant Latin he cited counterproof, related history, and set forth his arguments. He spoke rapidly and fluently, at times becoming eloquent and employing gestures such as might have enlivened the classic forum. The student responded bravely and went on with his paper.

This alternate reading and discussion continued for an hour, when another man ventured to defend his thesis against the learned assaults of the professor and of his companions. Oftentimes in these discussions papers demanding much original research are given, and forming perhaps the beginning of a reputation which will culminate in a professorship. The *seminar* is a feature of every department, and here some of the best work is done. The *Ubungen* are less pretentious and are more elementary. They are something like our college recitation. The student is expected to prepare, though there is not the remotest hint of compulsion. If the topic is language, two men usually volunteer to pronounce or translate during the hour. For instance, Professor Trautmann, or more exactly, Dr. Trautmann, *privat docent*, has a class of this sort in English. He studied two years in England after making his State examination, and he is one of the younger class of men in the university whose ambition allows the old established professors no time to rest. Notwithstanding the national shyness respecting American authors, he has chosen one of Irving's works for the class-room. His own pronunciation, as well as his comments, denoted a nice appreciation of the shades of meaning and of the irregular sounds of English words. He delivers a course of lectures upon English historical grammar, beginning with the Anglo-Saxon. The student first read a paragraph from Irving; he was then drilled in the pronunciation, and various difficulties were made clear, the explanation perhaps involving the history of a word from remote times. In the study of language there seems nothing less than a physical impossibility, which the innate philological talent of a German will not master. The intricate vowel gradations of English

trouble him but slightly. The *th* however, is almost a physical impossibility; and next to that is the *w*. Some Germans cannot pronounce *th* as in "thing," but make it something like "sing." Others conquer even that. Grammar is taught scientifically; in other words, as related to that of other languages, or comparatively. The forms are all put upon the blackboard, and their origin is explained, with time to copy them if one is a rapid writer. The Germans are studying English, especially old English and Anglo-Saxon, with more energy than ever. They take pride in it as a Germanic language. Professor Wulcker, of Leipsic, is preparing a new and revised edition of Grein's great work, "The Library of Anglo-Saxon Poetry," which he expects to have ready next fall, He is the literary executor of Grein, whose death, last summer, left a vacancy that is hard to fill. Professor Braune, also of Leipsic, is writing a new comparative German grammar, which is expected to be especially complete in old and middle high German, and is awaited with great interest, By means of the *ubungen* (exercises) these freshest researches are practically taught.

A GREAT MAN GONE.

THE announcement of the death of Joseph Henry has gone out to all civilized lands through the telegraph wires and ocean cables that are so greatly indebted to him for voice and far-reaching power. In all these regions, and by all scientists, his death will be the occasion of deep regret, as the loss of a great man from their guild, although he had lived to the ripe old age of fourscore years. Known everywhere throughout the civilized world, it has so happened that intimate acquaintance with his character and great worth was confined mainly to those engaged in scientific pursuits and to the circle of his personal friends. He was too unselfish to be ambitious of the popular fame due to his labors and discoveries, and so there are no current biographies that do even the scantiest justice to the subject. His future biographer will, therefore, have to gather his material from the hundreds of volumes that contain the current records of his life-work year by year, as they appeared in Silliman's Journal of Science, the Transactions of the American Philosophical Society, the Journals of the Franklin Institute, the Reports and Publications for the Increase and Diffusion of Useful Knowledge of the Smithsonian Institution, the Reports of the United States Lighthouse Board, of which he was chairman, and other similar publications of this country and Europe. These contain the records of his scientific history, which, in one sense, was nearly all of his biography, except the pure and noble example of his private domestic and social life. Yet Joseph Henry stands in the front rank of the great men of science of his age, his work being of the nature and value that places his name side by side with those of Franklin, Ampère, Arago, Sir Thomas Young, Sir Humphrey Davy, Faraday, Sir William Thompson, and their eminent co-laborers in the same field, men whose peer Professor Henry was.

For the statistical part of his biography—that may be summed up in the brief paragraph which tells that he was born at Albany, New York in December, 1797, had a common school education, was watchmaker and engineer, managed to get a brief course of academical study at the Albany Academy, was made professor of mathematics there in 1826, where he took up the study of electricity and physics, went from there to Princeton College, New Jersey, in 1832, to fill the chair of Natural Philosophy, and from there was called to take charge of the Smithsonian Institution, Washington, in 1846, where he has been for the last thirty-two years. The following biographical sketch, from the Philadelphia *Ledger*, tells more at length the story of his useful life:

Prof. Joseph Henry, Secretary of the Smithsonian Institution, and the most eminent and distinguished scientist in the United States, died at Washington, on Monday, May 13th. He was born in Albany, New York, December 17, 1797. He received a common school education, became a watchmaker and civil engineer, and after a course of study in the Albany Academy, was appointed Professor of Mathematics in that institution. He turned his attention to physics, however, and in 1827 began a series of experiments in electricity, which led to many discoveries that have produced important results. In 1828 he had made improvements in the electro-magnets, which greatly increased their power when used with a small battery, and in the following year he exhibited at the Albany Academy electro-magnets more powerful than any before known. In experimenting to ascertain to what extent the coil could be applied in developing magnetism in soft iron and what the length of the wires used should be, he found that the magnetic action of a current is not sensibly diminished by the length of the wire. It is this that makes it possible to use the electric telegraph on long distances, and the importance of the discovery was fully recognized by Prof. Henry. In a communication written in 1830, and printed in the *American Journal of Science and Arts* (Vol. XIX.), he pointed out the adaptability of the facts he had demonstrated to the instantaneous conveyance of intelligence between distant points by means of the magnetic telegraph. Early in the succeeding year he produced motion in a little machine by means of magnetic attraction and repulsion—a power never before applied to mechanism. He also erected the first magneto-electric telegraph in the world by which intelligible sounds were transmitted over a mile and a half of wire to a sounder, which has never been improved in principle to this day.

About the same time Professor Henry began experiments intended to show the production of electricity from magnetism, but, having been interrupted, he was not able to complete them until after similar

results had been obtained by Prof. Faraday and Prof. Blake. Almost simultaneously in Italy, England, Scotland and the United States accounts were published by different investigators of the production of electrical currents by means of magnets and of electrical sparks from magnets. Professor Henry's experiments were probably the most satisfactory of the series.

An account of them was published in the *American Journal of Science and Arts* for July, 1832. The value of the young professor's discoveries may be judged from Shaffner's account of electro-magnetism, published in the *Telegraph Manual.* It is there recorded: "The discoveries of Henry were published to the world in 1831, and were the subject of discussion among scientific men on both continents. Since then there has not been any advance in the principles pertaining to the organization of the electro-magnet. Mechanically, it has been brought to a smaller size, and made more convenient for the purposes of its use." Six paragraphs tell of the discoveries of Oersted, Schweigger, Arago, Sturgeon and Henry, and two of them relate to the discoveries of the latter. Shaffner continues: "The above represents the true state of the science of electro-magnetism before the invention of the electro-magnetic telegraph of either continent, as none of them can date earlier than 1832. Without the discoveries above described, made by Sturgeon and Henry, the electro-magnetic telegraph would still be in the womb of time, awaiting the allotted hour for its birth." In describing the Henry magnet, Shaffner says: "With the same battery at least a hundred times more magnetism was produced by Henry's magnet than could have been obtained by Sturgeon's magnet. The developments were considered at the time of much importance in a scientific point of view, and they subsequently furnished the means by which magneto-electricity, the phenomena of dia-magnetism, and the magnetic effects on polarized light were discovered. They gave rise to the various forms of electro-magnetic machines which have since distinguished the age. Upon Henry's electro-magnet are based the various electro-magnetic telegraphs."

The subject is treated at length, because subsequent events combined to conceal the credit due to Prof. Henry as the discoverer of the facts in electro-magnetism which made telegraphing over long distances a possibility. In 1832, Morse had his attention turned to the subject of telegraphy by the experiments and discoveries of Henry, and in 1837, Prof. Henry himself went to Europe, and while visiting Prof. Wheatstone, explained to the latter how he had produced mechanical effects at a distance by the use of electro-magnets. The visit to Prof. Wheatstone was made in Feb., 1837, and in that same month, Wheatstone met Cooke and formed the partnership which led to the invention of the mechanical appliances used in the Wheatstone system of telegraphy. In 1846, having in the meantime been called to the chair of Natural Philosophy at Princeton College, which he had filled since 1832, Prof. Henry, at the request of the Regents of the Smithsonian Institution at Washington, then about to be organized, drew up a plan designed to carry out the intentions of its founders, and he was subsequently elected secretary or director of the Institution. He has held the office ever since, and has made the Smithsonian Institution famous throughout the world. Its publications are of great scientific value, and many of them are from the pen of Prof. Henry. He has also served the general Government without extra compensation in many departments, but chiefly as the Chairman of the Lighthouse Board attached to the Treasury Department. He was appointed to this office by President Fillmore, and during his long service has conducted many important experiments to determine the best form of lenses, the oils giving the best lights, the most efficient fog signals, syrens, whistles and bells. He has also contributed valuable papers to scientific literature on the general subjects of light and sound, and made the discoveries in regard to the causes of acoustical obstruction of the atmosphere, rediscovered by Prof. Tyndall about two years ago. Prof. Henry's study of acoustics led to the publication of a paper on that subject, as applied to churches and other public buildings.

He was President of the National Academy of Sciences, which recently held its annual session at Washington, and was also President of the American Association for the Advancement of Education. Although he was the author of many valuable reports and treatises, which are to be found in *Silliman's Journal of the Sciences and Arts*, the Journal of the Franklin Institute and the reports of the Smithsonian Institution and Transactions of the American Philosophical Society, they have never been compiled and issued in book form. Among his great services to the country was the organization of a system of volunteer meteorological observations, which subsequently became the basis on which the Weather Bureau was established.

Dr. Henry was a devotee of science, pure and simple. In his great calling he was most unselfish. What he discovered he gave freely and immediately to the world for the use of the world. He sought scientific and physical truth for its own sake, hoping and believing his researches would be of use to his fellow-men. The thought of profiting by his discoveries had no place in his contemplation, and so with ample opportunities for making personal fortune, he had for himself and family only the savings from the salaried earnings of a laborious and fruitful life.

His personal character was among the kindliest, most lovable and noble. With a power to penetrate the mysteries of nature and of human life such as few men have been gifted with, he never presumed to go beyond the investigation of physical and moral science —never trenched upon the domain of revealed religion—never attempted to subject the soul of man to the tests of the laboratory, or to scientific experiment. That he held to be beyond his province. His faith in the Hereafter was based upon the belief and the practice of good men and good women, as their histories came down to him through all recorded time. It was the unquestioning, but firm and strong, reliance of a man with power to peer into the "unknowable" fully equal to that of the greatest minds now engaged in this field of inquiry. Here—as it was not scientific investigation as he understood his duty—he held by the faith of his fathers, that there is a just and merciful God: and so he died, like Newton, great and good, as he had lived.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, June, 1878.

THE written reports of superintendents for 1878 will be limited to *three* pages of the printed state report. Within that space, it is believed that each superintendent can compress an account sufficiently full of the educational progress made in his county, city or borough during the year, and indicate the educational work still remaining undone. All preliminaries, generalities and long descriptions may be dispensed with, and the reports take the form of a few comprehensive, pointed paragraphs, giving only such facts and making only such suggestions concerning school affairs as will be of interest to all friends of education.

Additional space not exceeding a page, will be allotted to any superintendent who desires to insert corrections of his last report, or new matter of a historical character not therein included.

The statistical reports should be made as complete as possible. Every item called for should be given. If not satisfactory in this respect, they will be returned. The facts stated in the statistical report should not be repeated in the written report.

All superintendents' reports should be on file in this department by the fifteenth of July.

LIST OF COUNTY, CITY AND BOROUGH SUPERINTENDENTS.

THE following is the list received at the School Department of Superintendents of common schools, with the post-office address and approximate salary, elected in this State on Tuesday, May 7th. The salaries of City and Borough Superintendents are not given, as some of these officers are also principals of their respective high schools, and the additional sums to be paid them for general supervision are not yet known at this Department. The list is made up from the returns of the elections.

COUNTY SUPERINTENDENTS.

Adams, Aaron Sheely, Gettysburg	$1,000
Allegheny, James Dickson, Allegheny City	2,000
Armstrong, A. D. Glenn, Putneyville	1,179
Beaver, Benjamin Franklin, New Brighton	1,000
Bedford, James W. Hughes, Everett	1,017
Berks, Samuel A. Baer, Kutztown	1,949
Blair, John H. Stephens, Martinsburg	1,000
Bradford, Geo. W. Ryan, Towanda	1,800
Bucks, W. W. Woodruff, Newtown	1,500
Butler, James M. Marshall, Jacksville	1,107
Cambria, Hartman Berg, Ebensburg	1,000
Cameron, N. H. Schenck, Emporium	800
Carbon, R. F. Hofford, Lehighton	1,000
Centre, Henry Meyer, Rebersburg	1,500
Chester, Jacob W. Harvey, Unionville	1,607
Clarion, A. J. Davis, Rimersburg	1,000
Clearfield. M. L. McQuown, Clearfield	1,000
Clinton, Thomas N. Magee, Lock Haven	1,000
Columbia, W. H. Snyder, Orangeville	1,000
Crawford, C. F. Chamberlain, Cambridgeboro'	1,701
Cumberland, S. B. Shearer, Shippensburg	1,000
Dauphin, D. H. E. La Ross, Hummelstown	1,000
Delaware, Albert Stewart, Ridley Park	1,500
Elk, Geo. R. Dixon, Ridgway	1,200
Erie, Charles Twining, Union City	1,500
Fayette, Wm. H. Cooke, Uniontown	1,112
Forest, H. S. Brockway, Tionesta	800
Franklin, S. H. Eby, Greencastle	1,151
Fulton, H. H. Woodal, McConnelsburg	800
Greene, S. F. Hoge, Jefferson	1,000
Huntingdon, Wm. R. Baker, Orbisonia	1,000
Indiana, Samuel J. Craighead, Elder's Ridge	1,080
Jefferson, William A. Kelly, Frostburg	1,000
Juniata, Wellington Smith, Thompsontown	1,000
Lancaster, B. F. Shaub, Lancaster	2,000
Lawrence, D. F. Balph, New Castle	1,000
Lebanon, Wm. B. Bodenhorn, Annville,	1,000
Lehigh, J. O. Knauss, Allentown	1,300
Luzerne, James M. Caughlin, Kingston	2,000
Lycoming, T. F. Gahan, Montoursville	1,500
McKean, W. H. Curtis, Smethport	1,000
Mercer, Andrew J. Palm, West Middlesex	1,500
Mifflin, W. C. McClenahen, Milroy	1,000
Monroe, A. A. Dinsmore, Stroudsburg	1,000
Montgomery, R. F. Hoffecker, Conshohocken	1,500
Montour, Mahlon C. Horine, Danville	800
Northampton, B. F. Raesly, Mount Bethel	1,098
Northumberland, W. M. Boal, Northumberland,	1,058
Perry, S. B. Fahnestock, Duncannon	1,000
Pike, John A. Kipp, Newfoundland, Wayne co.	800
Potter, A. F. Hollenbeck, East Hebron	1,000
Schuylkill, Jesse Newlin, Port Carbon	2,000
Snyder, Wm. P. Scharf, Selinsgrove	1,000
Somerset, J. B. Whipkey, Berlin	1,017
Sullivan, J. Pennington Little, Laporte	800
Susquehanna, Ozro E. French, Jackson	1,500
Tioga, Sarah I. Lewis, Westfield	1,292
Union, A. S. Burrowes, Mifflinburg	800
Venango, S. H Prather, Franklin	1,500
Warren, N. R. Thompson, Sugar Grove	1,200
Washington, J. B. K. McCollum, California	1,500
Wayne, Hadley B. Larrabee, Pleasant Mount,	1,000
Westmoreland, J. R. Spiegel, Greensburg	1,638
Wyoming, Chas. M. Lee, Tunkhannock	1,000
York, David G. Williams, York	1,656

CITY AND BOROUGH SUPERINTENDENTS.

Allegheny, Leonard H. Durling, Allegheny	
Altoona, David S. Keith, Altoona	
Carbondale, Dwight N. Lathrop, Carbondale	
Chester, Chas. F. Foster, Chester	
Columbia, B. G. Ames, Columbia	
Easton, W. W. Cottingham, Easton	
Erie, H. S. Jones, Erie	
Harrisburg, Daniel S. Burns, Harrisburg	
Hazleton, A. P. Supplee, Hazleton	
Lebanon, Jacob T. Nitrauer, Lebanon	
Lock Haven, John A. Robb, Lock Haven	
Mahanoy City, Wm. L. Balentine, Mahanoy City,	
Meadville, Samuel P. Bates, Meadville	
New Castle, Martin Gantz, New Castle	
Norristown, Joseph K. Gotwals, Norristown	
Pittsburgh, George J. Luckey, Pittsburgh	
Pottsville, B. F. Patterson, Pottsville	
Reading, R. K. Buehrle, Reading	
Shamokin, F. M. Bates, Shamokin	
Shenandoah, G. W. Bartch, Shenandoah	
Titusville, Henry H. Hough, Titusville	
Williamsport. Sam'l Transeau, Williamsport	
York, William H. Shelly, York	

SALARIES OF SUPERINTENDENTS.

THE following is the text of the bill recently passed by the Legislature, regulating the salaries of County Superintendents in the various counties of Pennsylvania;

SEC. 1. *Be it enacted, etc.*, That the salary of each Superintendent of Common Schools, elected according to law in the year one thousand eight hundred and seventy-eight and thereafter, shall be four dollars and fifty cents for each school in his jurisdiction at the time of his election, to be paid out of the general fund appropriated for common schools: *Provided*, That the salary of a County Superintendent shall in no case be less than eight hundred dollars nor more than two thousand dollars per annum, and in counties with over one hundred schools it shall not be less than one thousand dollars. *And provided further*, That conventions of school directors, when assembled for the purpose of electing a County Superintendent, may vote him a salary greater than the amount he would receive by this act, such increase to be in all cases taken from the school fund of the county thus voting. That in all counties having over two hundred and ninety schools, or twelve hundred square miles of territory, or school term exceeding seven and one half months, the salaries of said superintendents shall not be less than fifteen hundred dollars.

SEC. 2. That so much of section thirty-nine of the act of May eighth, one thousand eight hundred and fifty-four, as requires that a convention of school directors shall determine the compensation of a County Superintendent, is hereby repealed, except so far as provided for in this act.

THE STATE APPROPRIATION.

THE annual district reports and certificates should be sent to the Department of Public Instruction early in June, just as soon as the accounts of the old Boards have been settled, audited, and the new Boards have organized. Quite a number of superintendents have, heretofore, been able to send in every report and certificate in June. With proper effort on the part of school officers this can be readily done in every county. Will these officers see to the matter promptly? How many superintendents will this year fill the roster of their several districts by the end of June?

As soon as the State Appropriation is payable at the State Treasury, *warrants will be issued in the order in which the reports have been received at the Department.*

BOOK NOTICES

THE PHILOSOPHY OF ARITHMETIC.—*By Edward Brooks, A. M., Ph. D., Principal of State Normal School, Millersville, Pa., and Author of Normal Series of Mathematics. Pp.: 570. Philadelphia: Sower, Potts & Co. Cloth, $2.25. To Teachers for Examination, $1.75.*

This elaborate work of Dr. Brooks embodies—of course, in clear statement and with logical arrangement—the results of his study and professional labor during the past quarter of a century. The name of the author is already widely and favorably known in connection with his mathematical text-books, which have taken rank with the best yet issued; and this book, more than any that has preceded it, will give the stamp of permanency to his reputation as a writer on mathematics. The work has been divided into five parts, as follows: 1. The Nature of Arithmetic; 2. Synthesis and Analysis; 3. Comparison; 4. Fractions, and 5. Denominate Numbers. The Introduction treats of the origin and development of the science among the Greeks, Chaldeans, Egyptians, and Hebrews, and of the decimal system among the Hindoos, the Arabs, the Romans, and the Saxons; also of the early writers on Arithmetic, of the origin of arithmetical processes, etc., with much collateral matter interesting to the student and general reader. Parts II. and III. are of special interest. It is in these departments almost exclusively that the modern text-book has made its advance upon the books in use thirty years ago, and probably no one in this field of authorship has given more time or thought to these branches of the subject, or with better results, than our author himself.

The work is received with much favor by the educational public and must prove of great value to teachers. It is issued in handsome style by Messrs Sower, Potts & Company, of Philadelphia, whom the reader may address for descriptive circular.

POPULAR ASTRONOMY: *By Simon Newcomb, L.L D., Professor U. S. Naval Observatory. Author of "A B C of Finance." One Hundred and Twelve Engravings and Five Maps of Stars. Octavo. Pp.: 566. New York: Harper & Brothers. Cloth, $4.00.*

Astronomy was "popular" in the early days, before the dawn of history, when it was the only science that seems to have engaged the thoughts of men; and in lands where the stars were studied then they are studied to-day. To the little Arab lad that runs by the side of the camel the leading stars and constellations are at this day as well-known as other familiar things in his every-day life, while the chances are great that the well-to-do traveler—the Howadji who has hired the camel and rides upon it—may not know a single star by name, nor even the distinction between fixed star and revolving planet. The average man among cultured nations is wofully lacking in the knowledge of the heavenly bodies. The science should be made so "popular" that everybody would know the more conspicuous stars by name, as towns are at once located on the map by the student of geography, and the time is coming when this knowledge will be as common among civilized men as it is to-day among the Arabs of the Desert.

In the elegant volume before us Professor Newcomb has produced a treatise on astronomy which will commend itself to the popular taste, and at the same time interest the most profound scholars. Its object is to explain the structure of the heavens in language which may be understood by those who have forgotten their mathematics, or who may never have been beyond the ordinary arithmetic, and to answer the questions which intelligent people are constantly asking about telescopes and the discoveries made with them. The subject is developed in the historic order,

the reader being shown in the first part how, from the crude observations of the heavenly bodies made by the ancients, men were able to ascend step by step, until Newton and Laplace mastered the laws of the celestial motions. The remaining and larger portion of the work is principally devoted to the telescope and its discoveries. Technical details which might weary the reader are, for the most part, avoided, while especial attention is devoted to the philosophical side of the subject. But, while the historic and philosophic sides of the subject have been treated with greater fullness than is usual in books of this character, the purely technical side has been proportionally condensed. Of the four parts into which it is divided, the first two treat of the methods by which the motions and mutations of the heavenly bodies have been investigated, and the results of such investigation, while in the last two the individual peculiarities of those bodies are considered in greater detail. Owing to the great interest which now attaches to the question of the constitution of the sun, and the rapidity with which our knowledge in this direction is advancing, the author deemed it advisable to present the latest views of the most distinguished investigators of this subject from their own pens. Four of these gentlemen—Rev. Father Secchi, of Rome; M. Faye, of Paris; Prof. Young, of Dartmouth College, and Prof. Langley, of Allegheny Observatory—have, at his request, presented brief expositions of their respective theories, and these constitute one of the most interesting features of the book. The illustrations and descriptions of the great telescopes of the world are also a very practical feature of the work.

AN AMERICAN GIRL: *Her Four Years in a Boys' College. New York: D. Appleton & Co. 1878.*

A story of College life written in pleasing style, with enough of incident to sustain the reader's interest in the narrative. Wilhelmine Elliott encounters prejudice, suffers annoyance, and is for a time coolly ignored by those who regard the presence among them of a young woman as an innovation upon time-honored usages. But brains and culture backed with patience and energy, carry the day at last, and *Alma Mater* comes to regard her daughter as her sons with equal pride. Our colleges cannot have too many such students. The volume has in it much encouragement for the girls who are resolved upon acquiring the best training that the modern college can afford.

THE POPULAR SCIENCE MONTHLY AND SUPPLEMENT. *D. Appleton & Co, New York.*

These two invaluable publications, for April, have reached us. As usual, they are both filled with a variety of articles on scientific and ethical subjects, principally by men of the most distinguished ability in their various departments. The *Monthly*, among other papers, contains a continuation of Herbert Spencer's treatise on the "Evolution of Ceremonial Government;" "The Marpingen Miracles," an account of the recent discussion of those alleged phenomena in the Prussian Chambers, which was brought on by an ultramontane attack on the Government, for the exercise of the civil power in the affair; and a sketch of the life and scientific work of Professor Secchi.

The Supplement has an excellent article on "Equality," by Matthew Arnold; "Impressions of America," by R. W. Dale, a very ingenuous and friendly view of our national condition by an Englishman; "Forest and Field Myths," by W. R. S. Ralston, a readable paper, full of interesting anecdote, on the folk-lore of ancient and modern nations, etc. No teacher of good average intelligence can do better than to expend $5 for the Monthly, or $3 for the Supplement. For $7 he can have both publications.

P. S.—The May numbers of these two publications have been received since the above notice was written, and both present very attractive tables of contents. Among the articles in the *Monthly* are an illustrated one entitled "How Sound and Words are Produced," on the "Liquefaction of Gases," and another on the "Relation of the Finite to the Infinite." The *Supplement* contains an admirable article by Frances Power Cobbe on "Wife-Torture in England," and a paper on "Man and Science," in refutation of the Darwinian theory of our descent from a simian ancestry, together with much other instructive and readable matter.

MESERVEY'S BOOK-KEEPING. *Single and Double Entry. By Prof. A. B. Meservey, A. M., Ph. D. Pp.: 156. Boston: Thompson, Brown & Co.*

The elements of book-keeping by single entry are so simple that in the ordinary school course, a few weeks study, under common sense instruction, during the penmanship half-hour, should make the average pupil familiar with both its theory and practice. There is nothing whatever in this branch of the subject that is complicated or difficult, and the matter is of such general importance and so universally neglected in the schools, that Superintendents would, we think, do well to include Single Entry under the head of "Arithmetic" in their annual examinations. The book under notice is an excellent one. A friend who has had much experience in this direction pronounces its treatment of Double Entry "the best he has ever seen." It is the work of practical teachers, and presents methods that have been very successful in the school-room. See advertisement elsewhere.

THE NATIONAL SUNDAY-SCHOOL TEACHER closes the past half-year with a most excellent number. The treatment of the lessons in Daniel is every way worthy the high reputation of this journal. The notes and the comments are so helpful and practical that it is easy to see why this magazine is such a favorite with Sunday-school workers. The amount of information which it succeeds in packing into each number is somewhat of a marvel. And the editorial departments are charming and stimulating reading. *The Scholar's Weekly* is also corresponding helpful to the scholar. *The Little Folks* well sustains its reputation for good pictures and the best of reading for the infant classes. Adams, Blackmer & Lyon Publishing Company, Chicago, Illinois.

THE "COLLEGE, ACADEMY, SEMINARY AND INSTITUTE," of Philadelphia, is a semi-monthly magazine published in the interest of colleges and private schools. Its success may be inferred from the fact that the present number has been enlarged, and the twelve large, three-column pages are well filled with interesting matter and short, well-displayed advertisements. It has the appearance of a plant of vigorous growth and of a long life.

THE "WESTERN," of St. Louis, has been changed from a monthly to a bi-monthly, and now comes to us in an enlarged form, containing one hundred and eighteen pages. Its purpose is hereafter to devote itself to the discussion of questions appertaining to general literature and social science, as well as to those of an educational character. It is meant to be an exponent of western life and western thought and sentiment. We shall like it on that account, and most heartily wish it success.

THE HYMN AND ITS AUTHOR.—The noble hymn, "I would not live alway," has long been a favorite with the whole Christian Church. It breathes a spirit of sweet comfort, perfect trust, glad anticipation. It has been sung by millions scattered all over the world, and will be sung no less hopefully by untold millions yet unborn. The original first appeared in the *Episcopal Recorder*, in Philadelphia, in 1824, in six verses, of eight lines each. In 1826, a committee was appointed to prepare a fuller collection of hymns to be used in the Episcopal service. Dr. H. Onderdonk, of Brooklyn, a member of the committee, abridged the poem to a hymn of suitable length for divine worship, and submitted it to its author, Dr. Wm. A. Muhlenberg, for revision. There were no changes from the sentiment of the original composition. The general committee did not meet until 1829. The report of the sub-committee was presented, and each of the hymns passed upon separately. When this hymn came up one of the members said it was very good but rather sentimental, upon which it was rejected. Dr. Muhlenberg, who was not suspected as its author, also voting against it. This he supposed was the end of it, for the committee agreed upon their report that night and adjourned. But the next morning Dr. Onderdonk, who had not attended on the previous evening, called on Dr. Muhlenberg to inquire what had been done. Upon being told that among the rejected

ABIDE WITH ME.

Reverently. W. H. MONK. J. F. LYTE.

1. A - bide with me, fast falls the ev - en - tide; The dark-ness
2. Swift to its close ebbs out life's lit - tle day; Earth's joys grow
3. I need Thy pres - ence ev' - ry pass - ing hour; What but Thy
4. Hold thou Thy cross be - fore my clos - ing eyes; Shine through the

deep - ens; Lord, with me a - bide; When oth - er help - ers
dim, its glo - ries pass a - way; Change and de - cay in
grace can foil the tempt - er's power? Who, like Thy - self, my
gloom, and point me to the skies; Heav'n's morn - ing breaks, and

fail, and com - forts flee, Help of the help - less, oh, a - bide with me.
all a - round I see; Oh, Thou who chang - est not, a - bide with me.
guide and stay can be? Thro' cloud and sun - shine, Lord, a - bide with me.
earth's vain shad - ows flee; In life, in death, O Lord, a - bide with me.

hymns was the one representing their joint labors, he said, "That will never do;" and went about among the members of the committee, soliciting them to restore the hymn in their report, which accordingly they did; so that to him is due the credit of giving it to the Church at that time. Dr. Muhlenberg is still living, (1875,) being nearly eighty years of age. The following brief sketch of the author of "I would not live alway," will not prove uninteresting to those with whom the hymn is a favorite. He was born in Philadelphia, in 1796, and is the great-grandson of the Rev. Melchior Muhlenberg, the founder of the German Lutheran Church in America. He is a grandson of General Peter Muhlenberg, the patriot clergyman who served as colonel in the war of the Revolution and formed a regiment among his parishoners. From this grandsire down Dr. Muhlenberg inherits the remarkable energy that has made his life so useful. He was ordained a clergyman of the Episcopal Church about 1820. He preached for some time in Lancaster, Pa., from which place he removed to Long Island, and thence to New York, as rector of the Church of the Holy Communion, a memorial church built by his sister. But his greatest work is St. Luke's Hospital, which he projected and built, increasing a fund of $30 in 1846, to over $200,000 in 1857. Since its completion he has presided over it as superintendent and chaplain, revered alike by its officers and patients.

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